A Guide to farm home planning and modernization

9 MA

PROVINCE OF SASKATCHEWAN

DEPARTMENT OF RECONSTRUCTION AND REHABILITATION

A Guide to Farm Home Planning and Modernization

Published by the Authority of
HONOURABLE JOHN H. STURDY,
Minister of Reconstruction and Rehabilitation

Printed By
THOS. H. MCCONICA, King's Printer.

Foreword

No more worthy objective for the reconstruction period can be envisioned than making our province a better and more attractive place in which to live and no greater contribution to this end can be made than bringing the amenities of life to rural areas. This involves many different approaches of which improvement in farm housing is one of the more intimate.

Since 1944 the Saskatchewan Farm Housing Committee has been studying the whole question of farm housing. Intensive research has been carried on by this Committee and its staff under the Chairmanship of Professor R. P. Frey, Department of Agricultural Engineering, College of Agriculture, University of Saskatchewan, and "A Guide to Farm Home Planning and Modernization" herewith presented is the result of their efforts. The bulletin will fill a long felt need.

To the members of the Farm Housing Committee and its staff, I wish to extend the thanks and appreciation of the Government for their contribution towards improved standards in farm homes of Saskatchewan.

JOHN H. STURDY,
Minister of Reconstruction
and Rehabilitation.

Farm Housing Committee

• • •

R. P. FREY, Chairman
Professor of Agricultural Engineering,
Department of Agricultural Engineering, University of Saskatchewan

MRS. WALLACE THOMSON
Pense, Saskatchewan

MISS BERTHA OXNER
Professor and Director of Extension Work Among Women,
University of Saskatchewan

MISS EDITH ROWLES
Dean of Women, University of Saskatchewan

C. COXALL
Department of Public Works

J. G. SCHAEFFER,
Director, Division of Sanitation, Department of Public Health

G. N. DENIKE
Department of Agricultural Engineering,
Dominion Experimental Station, Swift Current

G. B. HARRISON, Secretary,
and Farm Buildings Specialist,
Department of Agricultural Engineering,
Dominion Experimental Station, Swift Current

Introduction

• • •

A Guide to Farm Home Planning and Modernization is published to help those planning to remodel, extend, or modernize their present homes, and those considering building a new home.

This publication presents an over-all picture of home planning and modernizing. It will guide those who wish to draw up plans for their own homes as well as those who are studying plans available from various sources, in that these plans can be evaluated in the light of the needs of the farm. Many people have chosen a house plan obtained from a building supply dealer or other source. Too often the house built according to one of these plans has been wholly unsatisfactory for the needs of a farm family. For example the house may have been designed for the city and therefore was unsuited to farm conditions.

A farm home should be designed for comfort and convenience. It should be the pride of the family living in it. As the farmer is proud of his tractor, his horses, his livestock, his barns, his crops, and his shop, so the family members should be proud of their home.

This introduction would not be complete without a word on costs. Recall to mind the houses you have visited. Were those that cost the most to build, furnish and equip the best and most desirable? Did these homes meet the needs of the farm? Were they convenient, comfortable, easy to heat, easy to keep clean, and easy to keep in good repair, inside and out? Was the mortgage against the house so large that the family could not enjoy the home because of financial worries and the fear of losing farm and home due to crop or market failure? People receiving regular pay envelopes are advised to invest not more than twice their annual income for house and lot. The farmer who manages his enterprise well will consider the cost of his home as somewhat less than this. That is, the cost of the home will be less than twice the average yearly income.

TABLE OF CONTENTS

PAGE

FOREWORD 3

FARM HOUSING COMMITTEE 4

INTRODUCTION 5

SECTION 1 9

Size and Type of House to Build
—One storey home
—One-and-a-half storey home
—Two storey home

SECTION II 12

Costs
—Cost of Remodeling and Extending
—Keeping the House in Good Repair

SECTION III 14

The Farm Home
—General Principles in Planning Applicable When Remodeling or Building a New Home
—Areas in the Farm Home
—Work Areas
—Resting Areas
—Dining Areas
—Recreation and Entertaining Areas
—Storage Areas
—Passageways
—Stairways
—Entrances

SECTION IV 24

The Farm Kitchen
The Utility or Work Room
The Basement of the Farm Home

SECTION V 34

Planning the Farmstead
—Water Supply for the Farmstead
—Soil and Drainage of the Farmstead
—Size of the Site
—Protection from Wind
—Roads and Highways
—Telephone Lines and Mail Routes
—Power Lines
—Laying Out the Farmstead

SECTION VI 41

House Plans

List of Selected References 60

Questions on Home Planning, Furnishing and Equipping..61 and 62

LIST OF ILLUSTRATIONS

FIGURE		PAGE
1.	*A one storey home*	10
2.	*A one-and-a-half storey home*	11
3.	*A two storey home*	12
4.	*The square type house of two storeys provides more floor space per dollar spent than the rambling type of one storey home*	13
5.	*Bedroom storage closets*	17
6.	*Plan of a stairway*	20
7.	*Drawings showing approved dimensions and design of stairs*	21
8.	*Protected Front Entrance*	22
9.	*Grade Entrance—Corner*	23
10.	*Grade Entrance—Centre*	23
11.	*Photographs of Kitchen Storage Cabinets*	25
12.	*Water supply in the Kitchen*	26
13.	*Kitchen arrangement according to Work Centres*	26
14.	*Toe space under Kitchen Counters*	28
15.	*"U" Type Kitchen Design*	28
16.	*Broken "U" Type Kitchen Design*	29
17.	*"L" Type Kitchen Design*	29
18.	*Corridor Type Kitchen Design*	30
19.	*Single Centre Kitchen Design*	30
20.	*Large Kitchen with Dining Area*	31
21.	*The utility room is considered essential in the farm home. This drawing shows a kitchen and utility room with the stairs to the basement conveniently located*	32
22.	*The space in the basement should be used to the best advantage*	33
23.	*Basement showing clearances, footings, etc.*	33
24.	*Laying out of a Farmstead—1st step*	36
25.	*Laying out of a Farmstead—2nd step*	37
26.	*Farmstead Plan—north of the highway*	37
27.	*Farmstead Plan—east of the highway*	38
28.	*Farmstead Plan—south of the highway*	38
29.	*Farmstead Plan—west of the highway*	39
30.	*Photographs of Contour Planting*	40

ACKNOWLEDGMENT

The illustrations in this bulletin and the house plans were drawn by Miss Alice Mary Turner, B.H.Sc., under the direction of Mr. Greville B. Harrison, B.S.A.

LIST OF TABLES

		PAGE
I	Minimum Sizes of Bedrooms as Recommended by the Canadian Public Health Association	17
II	Door Widths	20
III	Standard Heights for Working Surfaces	27
IV	Common Dimensions of Bedroom Furniture	57
V	Common Dimensions of Dining Room Furniture	57
VI	Common Dimensions of Living Room Furniture	58
VII	Dimensions of Rooms and Closets	58

Section I

SIZE AND TYPE OF HOUSE TO BUILD

• • •

Size

In considering the size and type of house to build, plan for the years ahead, as well as for the present needs. A large home is needed for a relatively short time. The children grow up and leave home to go to school or college, to learn a trade, to enter a business, or to farm for themselves.

Two bedrooms in a home provide a satisfactory arrangement for a family consisting of the parents and one child, or two boys, or two girls.

The need for a third bedroom for a family consisting of the parents and a boy and a girl is for a period of about seven to ten years. If the family is larger a third bedroom will be needed for a longer time, perhaps thirteen to fifteen years.

Type

One storey homes predominate in Saskatchewan. A great many families suggest that a house consisting of a storey-and-a-half would suit their needs best. Plans for one storey, one-and-a-half storey, and two storey homes are included in this bulletin.

One Storey Home
(With full size basement)

Points in Favour:

1. Low, and therefore not so exposed to the wind.
2. The full size basement of a one storey home with the same number of bedrooms as a one-and-a-half or two storey home will be large and roomy. There would be plenty of room for storage of fuel, fruits, vegetables, trunks, etc. In addition, there would be space for a recreation room handy to the kitchen, and for hobbies.
3. Young people could entertain in the basement recreation room, leaving other members of the family undisturbed.
4. Bedrooms on the ground floor.
5. A room not in use need not be heated.
6. Easier to paint.

Points Against:

1. May be harder to heat if floor space covers a large area.
2. A single storey house that provides as much room as a house of more than one storey may be more expensive to build.
3. Those who wish to rest may be disturbed by others who are entertaining, unless recreation facilities are provided in the basement.
4. Easy access between rooms is difficult to obtain in a large one storey house unless considerable space is used for halls.

Points in Favour: (Continued)

7. No space is taken up by stairs to the second floor. This saves cleaning and eliminates a source of danger.

8. Trees planted to protect the home from sun and wind and to make the setting more pleasing, become effective in a few years.

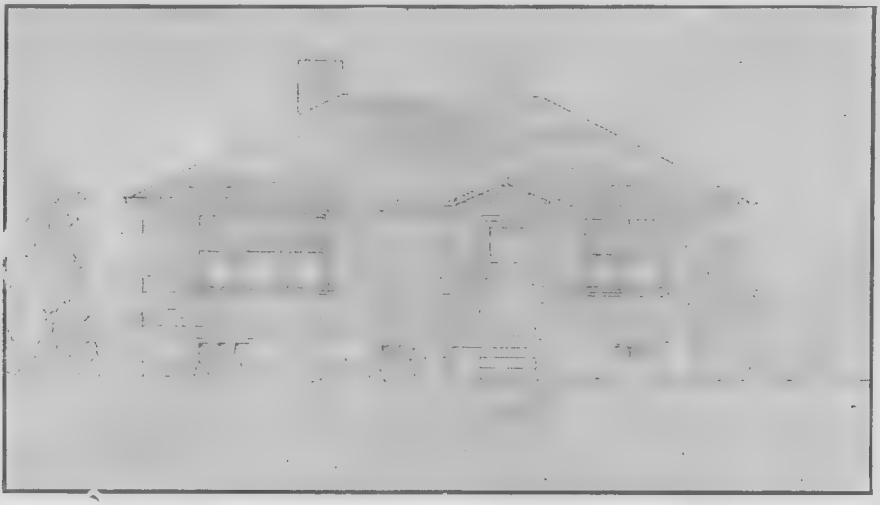


FIGURE 1—A one-storey home. For plans of one-storey homes, see pages 41-48.

• • •

One and a Half Storey Home
(With full size basement)

Points in Favour:

1. The basement will be smaller than that in a one storey house of the same capacity and therefore will cost less to build.

2. It lends itself to a compact design conducing to low cost construction and reduced heating costs.

3. The second floor could be left unfinished until extra room is needed. (It is presumed that provision is made for sleeping on the first floor).

4. When the children grow up and leave home, the second floor can be shut off from the rest of the house if bedrooms and bathroom are on the first floor.

Points Against:

1. Valuable space on the ground floor is used for a stairway to the second floor.

2. Second floor bedrooms may not be full height. Sloping ceilings make arrangement of furniture difficult.

3. It is difficult to arrange windows in the second floor to allow for cross ventilation in each room.

4. Less usable floor space per dollar spent than in a two storey house covering the same area.

Points in Favour: (Continued)

5. A one-and-a-half storey home is not as high as a two storey home and therefore not so exposed to wind.

6. Trees that grow quickly on the prairie will soon protect a one-and-a-half storey home.

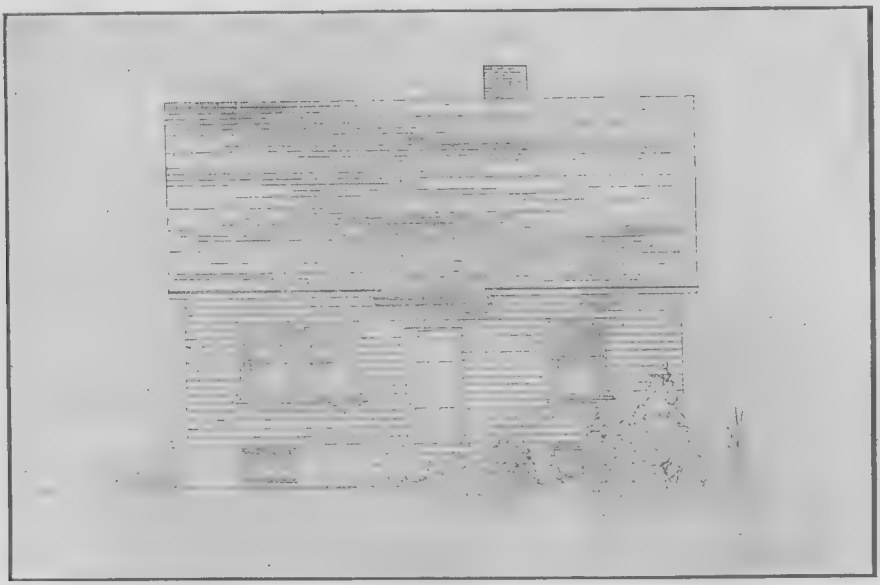


FIGURE 2 -A one-and-a-half-storey home. For plans of one-and-a-half-storey homes, see pages 49-54

• • •

Two Storey Home
(With full size basement)

Points in Favour:

1. A very spacious home can be built at comparatively little extra cost, by merely making the walls higher. From the cost point of view more floor space may be had per dollar spent.

2. A medium sized two-storey home is very compact. All the rooms on the second floor can have full height walls.

3. A bedroom can be included on the ground floor to reduce the amount of work if aged relatives live with the family or a member is sick.

Points Against:

1. A spacious home is often too large for the family at first and again when the children leave home.

2. It is difficult to get trees high enough on the plains to give full protection against the wind.

3. It is necessary to use long ladders to clean second storey windows and put on or take off storm windows and screens.

4. High wall surfaces are more difficult to paint.

Points in Favour: (Continued)

4. Easier to have windows on two walls for cross ventilation. Windows may be placed in the most desirable location for light and ventilation.

Note: Many who plan a two-storey farm home feel that the bathroom should be on the first floor as this arrangement reduces housework. Furthermore, if the ground floor only is in use the whole upstairs may be closed off and not heated.

FIGURE 3—A two-storey home. For plans of a two-storey house, see pages 55 and 56.

Section II

COSTS

A home should be designed to shelter the activities of the family in an efficient and pleasant way. These activities centre around serving meals, keeping the house clean, caring for clothes, personal duties of the family members, and recreation. There must also be provision for rest. To house all these activities, a struggle exists between what is desired and what can be had for a limited amount of money. The final house will be the result of many adjustments. For example:

—a clear distinction will have to be made between actual needs and desires.

—after distinguishing between desirable features and actual needs, an ad-

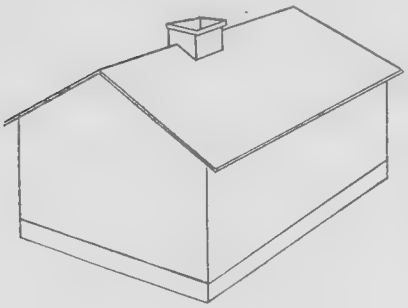
justment must be made to provide these needs at a cost related to the average yearly income on the farm.

—if financial resources permit, desirable features, as well as actual needs may be considered.

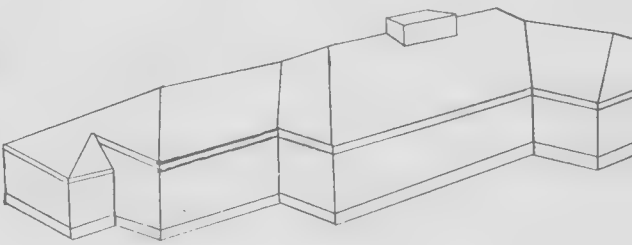
—an adjustment must be made between the different, and not always harmonious, interests of each family member and the space available.

These adjustments will vary in different families, according to individual interests and money available for shelter. For this reason, no single plan has been designed to suit a majority of the people.

Before plans are made of a new house or for modernizing the present home, it is necessary to know how much money can be spent. When this is known information on costs can be obtained from dealers handling building supplies, contractors, and carpenters. A table of costs is of very little help and may be very misleading as costs of materials and labour vary from year to year.



LEAST EXPENSIVE DESIGN
GREATEST AREA FINISHED FLOOR
SPACE PER DOLLAR
- SQUARE PLAN
- SIMPLE LINES
- TWO FLOORS



RAMBLING TYPE
EXPENSIVE DESIGN
LESS FINISHED FLOOR SPACE
PER DOLLAR

FIGURE 4 -The square type house of two storeys provides more floor space per dollar spent than the rambling type of one-storey home.

Cost of Remodeling and Extending

It cannot be over-emphasized that remodeling a home is likely to lead to costs in excess of the original estimate. There are so many unknown factors. It looks very easy to remove a partition, re-locate a door or a window but unforeseen problems will arise. The removal of a load-bearing partition may cause floors and ceilings to sag and bad cracks to appear in the plaster.

Remodeling jobs, as compared with new work, require about three times the amount of labour, and, to allow for waste and unforeseen needs, it is advisable to add 20 to 25% to the estimated cost of the material for the job.

Keeping the House in Good Repair

Every house, no matter how well it is built, needs attention and repair occasionally to make it last as long as possible. Not only are we interested in having the house kept in good repair but we desire to retard depreciation and to preserve its appearance.

Money will be saved if regular inspections are made and repairs attended to before further damage is done. For example the cost of redecorating may be saved if leaks in the roof are repaired as soon as they are noticed. Costly foundation repairs may be avoided if care is taken to see that rain or melting snow drains away from the house.

For further information on this topic, write for "Care and Repair of the House" by Vincent B. Phelan. This booklet contains over 100 pages and can be obtained by remitting twenty cents to the Superintendent of Documents, Washington, D.C., U.S.A.

Section III

THE FARM HOME

General Principles in Planning Applicable when Remodeling or Building a New Home

Many magazines and newspapers are featuring home designs and furnishings. Plans are also available from various building supply firms. These books show many house plans. Nearly all are designed for the city. "Eye-appeal" is emphasized to the fullest extent. Leaf through the pages of such material. Choose the plan you like best, and ask yourself these questions:

1. What would it be like to live in such a house? Think of the activities that go on in your farm home. Could these be carried on efficiently? Would open shelves and cupboards with glass doors mean extra work for the housewife?
2. Where would the men leave their work clothes? Their footwear? Where would they wash up before meals?
3. Is there a place for the children to keep their outdoor clothes?
4. Where would the cream separator be placed?
5. Where would the clothes be washed, dried, ironed?
6. Is the home designed for good circulation between various parts? That is, is it easy to go from one room to another without one or more rooms serving as a passageway?
7. Has sufficient storage space been provided?
8. Is the home suited to the climatic conditions of the Province?

Areas in the Farm Home

Each activity will need a definite area in the house. This does not necessarily mean a separate room for each, as several activities may be carried on in the same

room at different times or even at the same time. The following list may be useful as a guide in planning a home.

Work Areas	Toilet Areas
Resting Areas	Storage Areas
Dining Areas	Passageways and Stairways
Recreation and Entertaining Areas	Entrances

The above are dealt with in detail following.

Work Areas.

The amount and kind of work to be done in the farm home, the need for greater storage space, and special wash-up areas for outdoor people render city type homes unsuitable to the needs of the farm family. The working areas of the farm home should provide space for:

1. Meal preparation
2. Dishwashing
3. Washing dairy utensils
4. Laundry—washing and ironing
5. Food canning
6. Sewing
7. Homework assigned to school children
8. Office work (Keeping records and otherwise managing the farm enterprise).

If all these activities are to be carried on in the kitchen, it will have to be spacious and well arranged. Some families may plan to serve one or more meals in the kitchen. If this is the case, the kitchen should be sufficiently large to allow for a dining area. (See Figure 20, page 31, and plan 8, page 51.)

In many cases a work room near the kitchen is provided. It may be on the same floor as the kitchen or in the basement. The latter arrangement may be necessary where costs must be kept low. A utility room in the basement can be very useful if it is easily accessible from the kitchen as well as from the outside. A grade entrance will serve the dual purpose of providing access to the kitchen and basement. (See figures 9, page 23, 10, page 23, and 22, page 33. See also plans 5, page 46, and 9, page 53).

Homemakers like the utility room. Much of the work that would otherwise be done in the kitchen is done in this room, and leaves the kitchen free for fewer activities. The utility room is the place where such jobs as the family wash, receiving supplies from the outside and caring for the milk are done. (See THE UTILITY ROOM OR WORK ROOM, page 31).

In the modern farm home provision should be made for sewing, school work, and keeping business records. It is not always desirable or practical to have separate rooms for these activities, but some consideration should be given to the planning of suitable places for such activities. A bedroom may be provided with equipment for sewing, or a sewing corner may be provided in some other room, but not in the office.

Children may do their homework in the kitchen, dining room or in their bedrooms. This is a quiet activity and should not be hindered by conversation, playing musical instruments, or loud radio programs.

Many opinions exist regarding a separate room for the farm office. Some prefer a separate room serving as an office or a den; others like a space set aside in some other room, where a desk, chair, shelves and cupboards for books, bulletins, papers, etc., and perhaps a telephone can be included in the furnishings. This area should be readily reached from outside as well as from the kitchen or utility room. (See plans 7, page 49, and 8, page 51).

Resting Areas

Rest is an essential part of life. In providing for this need we are apt to think only of the bedrooms. These are important, but it is also important to plan other areas where one may sit or recline in quiet and comfort. In the kitchen, a corner containing a comfortable chair gives the housewife an opportunity to relax a few minutes and yet be in close contact with her work. The den, recreation, and entertaining and dining areas may be furnished so members of the family can take time out for relaxation. A porch readily reached from the kitchen is a haven for the housewife during the summer months.

The following points should be kept in mind when planning the location of bedrooms.

1. At least one bedroom should be on the first floor. This will save the housewife many steps. Caring for small children, a sick member of the family, or an elderly person will be much easier. (See page 55).

2. Bedrooms should be well ventilated. This may be accomplished by having the windows on two walls. One of these may be small, and located high enough to permit placing furniture under it.

3. Rather than build windows in a north wall, adequate ventilation may be provided if the bedroom door is left open.

4. Bedrooms will be more attractive if well lighted. Locate the bedrooms so they will have sunlight for at least part of the day. This may be done by having bedrooms with windows on the east, south, or west.

"Model Provincial Housing Regulations" states that a glass area equal to 10% of the superficial floor area is a minimum. That is, a bedroom 10′ x 10′ should have 10 sq. ft. of glass area.

5. With modern heating equipment, bedrooms may be kept warm so they may be used as a place in which to read, sew, or do school work in quiet and comfort. A warm bedroom is an ideal place for small children to play and have their toys.

6. Bedrooms should be provided with ample storage space for clothing. Built-in clothes cupboards should not be less than two feet deep.

7. From the standpoint of health it is important that bedrooms should have floor areas not less than those shown in Table 1. The height of the room from the finished floor to the finished ceiling should not be less than 7′ 6″. In the case of attic rooms an exception is made. (See also Table VII, page 58).

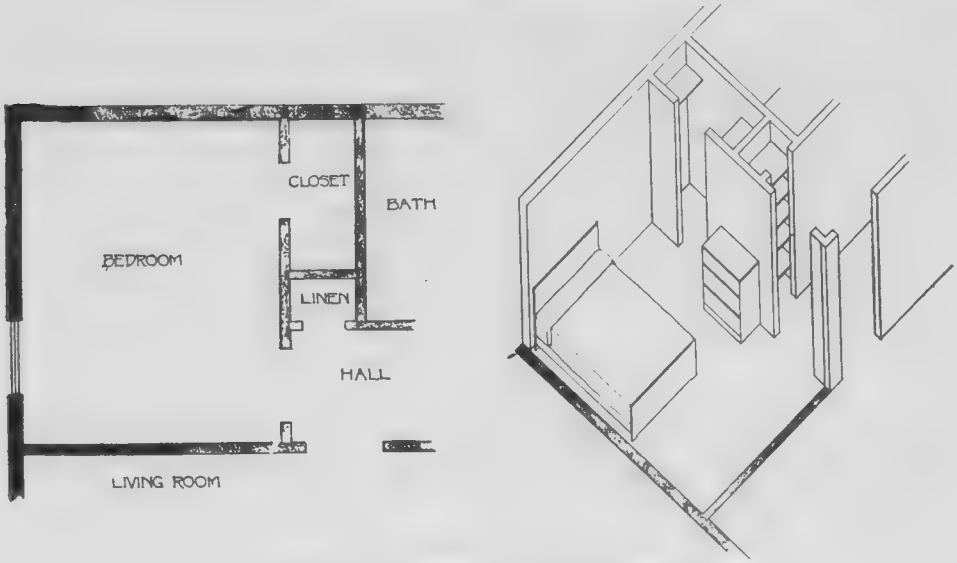


FIGURE 5—Bedroom Storage Closets.

TABLE I: Minimum Sizes of Bedrooms as Recommended by the Canadian Public Health Association. (1)

No. of Persons	Minimum Floor Areas
2 adults	110 sq. feet
1 adult, a child over 1 yr. but under 10 years	90 sq. feet
1 adult	70 sq. feet
1 child under 10 years	50 sq. feet

NOTE: "The area of any part of the floor space over which the vertical height of the room is, by reason of a sloping ceiling, reduced to less than 5 feet shall be excluded from the computation of the floor area of that room."

(1) Taken from "Model Provincial Housing Regulations" published by the Canadian Public Health Association.

Dining Areas.

Opinion is divided very nearly equally as to the best arrangement for dining. About one third of the farm women wishes to have a separate dining room, a second group prefers a combination dining-living room, and a third group maintains that a dining area in the kitchen is the best arrangement for a farm home. Each arrangement is considered below.

Separate Dining Room

Those who favour a separate dining room like to get away from the kitchen at meal time. These women also point out that the children may be trained to conduct themselves better.

In the past, where a separate dining room was provided, it was not used for dining as much as expected. It became part of the living room, or was used for other activities such as sewing, reading, office work, school work, etc. (See plans 8, page 51, and 10, page 55).

Combination Dining-Living Room

The group of women who favour the combination dining-living room prefer a large room. By eliminating the separate dining room a large room may be had for recreation, entertaining and dining. The dining area of this room should be near the kitchen so no more work is necessary in serving meals than would be the case with a separate dining room. Furnishings suited to the combination dining-living room have been designed in great variety.

Along with the dining area in the living room an additional area in the kitchen for serving meals is useful. Such an arrangement will save a great deal of work and the living room will not be subjected to so much wear and tear. (See plan 3, page 44).

Dining Area in the Kitchen

With modern equipment and furnishings, and with the pleasant colour schemes that may be used, a great many women maintain that a dining area in the kitchen fits in best with farm life. Such an arrangement saves the housewife much work, thereby giving her more time for other interests. It also greatly reduces the wear and tear on the rest of the house.

This plan has other advantages as well. The space in the past reserved for a separate dining room may be used for other purposes such as an extra bedroom, utility room, etc.

Recreation and Entertaining Areas.

Family members have varying interests. The home should permit these to be expressed. The problem is to arrange it so the interests of one person do not conflict with those of others. At the end of the day the parents and older members of the household may seek quiet and restful recreation while the young members will wish to engage in active and noisy pursuits. A room properly fitted up in the basement may be used for the noisy activities while the living room is recognized as a place for quiet conversation, good music, reading, writing and games that require mental rather than physical effort. The older children may have school work to do in the evening and a place should be provided to avoid placing the whole family under strain. As mentioned previously, school children might do their homework in their bedrooms if warm and well lighted.

When children must be inside because of bad weather, a place to play so that they need not be underfoot and interfere with the housework is worth considering. Here again, a play room in the basement is invaluable. (See basement plans, pages 43, 47 and 53). Other alternatives may be considered, such as a closed-in porch, or even the utility room if it is not in use.

Playmates of the young members of the family should feel welcome in the home. Children should be able to bring their friends home and entertain them without upsetting the whole household. The opportunity to do so will stand them in good stead later in life. It is a valuable part of their education. There will be times when adult visitors are entertained. On such occasions it is embarrassing for the parents if the children have no place to play other than the living room and their game happens to be that of seeking as much attention as possible.

Consider the exposure of the recreation, entertaining, and dining areas. Some like the morning sun in the dining room; many like the afternoon or west sun in the living room, and it is possible to have overhanging eaves that shut out the sun in summer, but allow the room to be flooded with light and cheerfulness when the sun is low on the horizon in the winter months.

Storage Areas

The farm home differs from the city home in many ways. One is the need for greater storage space. To plan for adequate storage space in a home it is helpful if a list of articles to be stored and possible places to store them is made. This is done in the following table:

Table Showing the Items that Require Storage and the Possible Places to Store Them.

Everyday clothes	Cupboard near service entry.
—workclothes	Cupboard in utility room or basement.
—children's clothes (outdoor)	Drying racks.
Footwear	
—rubbers, workboots,	Cupboard in utility room or basement.
—children's shoes	Cupboard near service entry.
Best Clothing and Shoes	Bedroom closets, halls, Cedar lined base-
—adults and children's suits, dresses, etc.	ment or other closet.
Sports equipment and children's toys	Special cupboard in bedroom, basement, utility room, porch.
Cleaning equipment	Cupboards under stairs, special closets in kitchen, hall (upstairs and down), workroom.
Books, papers, magazines.	Shelves and cupboards in living, dining or recreation area. Office areas. Cupboards and shelves in bedrooms.
Linen	Special cupboards in hall, bath, under
—bedding, towels,	stairs, drawers, in kitchen, or dining
—table linens	room cupboards.
Fuel	
—wood	Basement, under attached garage.
—coal, furnace oil, etc.	Attached garage, wood shed.
—gasoline	In separate building away from house.
Foods	
—home produced	Kitchen. See The Farm Kitchen, page 24.
—staple foods	Closets, refrigerators,
—perishables	Basement.
Trunks, bags, grips, etc.	Basement, attic, garage.

Passageways

As streets and avenues, roads and highways connect the various parts of a city or country, so it is necessary to connect the various parts of a home. A home may be laid out so that either good circulation is present or obviously absent. If members of the household can move about freely from room to room or from the basement to the second floor without having to dodge furniture, interfere with what others are doing, or leave a trail behind them that will make it necessary for someone to do extra mopping, tidying up, or sweeping, then the house is said to be well laid out as far as "circulation" is concerned.

The points to consider in planning a home so that you may go from one part of the house to another conveniently are:

1. The location of entrances from the outside
2. The location of doors between rooms
3. The direction the doors swing
4. The space for furniture
5. The location, design, and construction of the stairway. (See figures 6, below, and 7, page 21).
6. The location and width of halls. The National Housing Act states, (a) Vestibules or entrance halls shall have a width of not less than 3' 6" and a depth of not less than 3'6". (b) Halls or passageways shall have a width of not less than 3'0".

TABLE II. Door Widths

Side, rear and main entrance doors, living room doors to vestibules or entrance halls, and stair doors to habitable rooms in attic	not less than 2'8"
bathroom doors	not less than 2'4"
other room doors	not less than 2'6"
clothes closet doors	not less than 2'0"

The above widths are taken from "Minimum Standards of Construction," National Housing Act, 1944.

Stairways

For safety and comfort, stairs must be carefully designed and properly built. Avoid dangerous "winders". Winders are triangular treads used when a turn in the stairs must be made. In place of winders a landing should be used. (See figure 6).

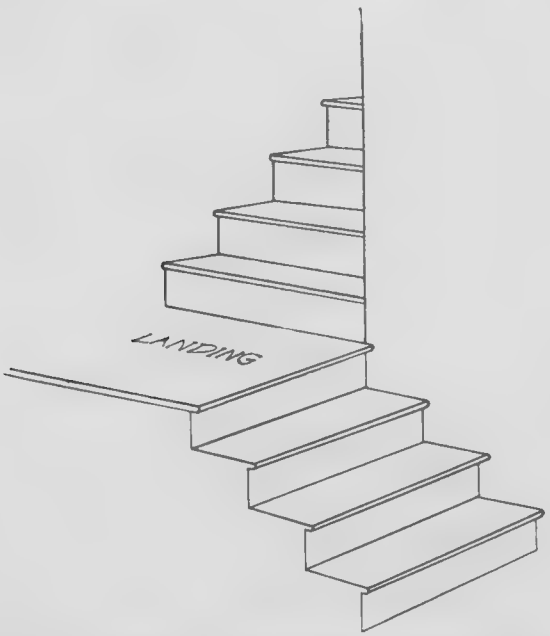


FIGURE 6—Plan of a stairway. In order to make a 90° turn, a landing is used.

The National Housing Act, in its "Minimum Standards of Construction" specifies:

(a) "Main stairs shall have a run of not less than 9" measured from face of riser to face of riser with an overall tread width including nosing of at least 10¼". The maximum riser height shall be 9" for basement stairs and 8" for all other stairs.

(b) "The clear width of stairs to attic storage space and basement shall not be less than 2' 6". Handrails shall be provided on basement stairs and around stairwells of attic spaces.

(c) "Where winders are required two angled risers with three winding treads will be permitted for one 90 degrees turn only on a stair connecting two floor levels. (Avoid the use of winders if at all possible.)

"At least 6'4" clear headroom shall be provided on all stairs measured vertically from the nosing of the tread. Clearance between handrails on main stairs shall not be less than 2' 10". Clearance between enclosing partitions around main stairs shall be not less than 3' 0".

"The use of a single riser on stairways will not be approved."

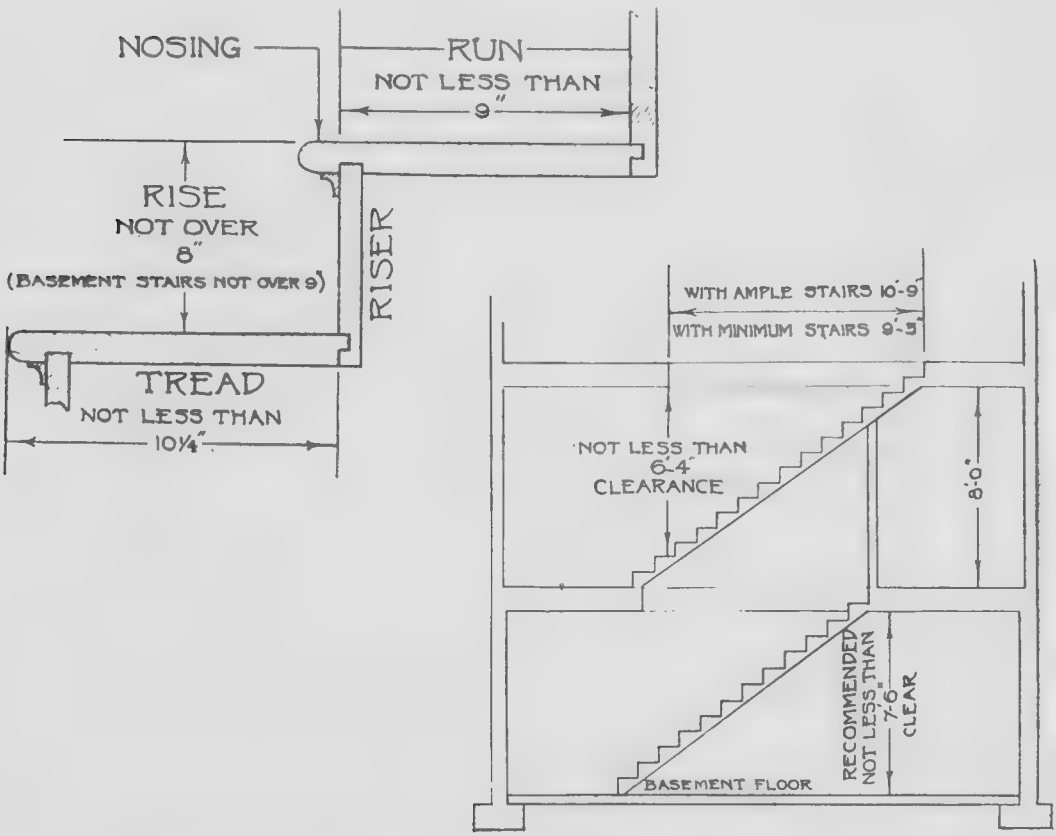


FIGURE 7—Drawings showing approved dimensions and design of stairs.

In the above specifications the maximum riser height is 8 inches for all except basement stairs, which may be steeper, but must not have risers greater than 9 inches.

Safe stair construction requires that risers be exactly equal in height. In other words, the height of the risers must be an exact multiple of the total height of the stairway.

The width of the tread should not be less than 10¼ inches. In some homes stairways must take up as little space as possible. Stairs with treads of 10¼ inches and risers of 8 inches are fairly steep but require only the minimum of space permitted under the National Housing Act. If space permits, stairs having treads of 10½ inches, and risers of 7 inches, would be more suitable.

Entrances

The entrance to the farm home deserves careful consideration. One of the first and most important points is that of protection. A door that opens directly from the outside into a room lets in the wind and snow and chills the house needlessly. In summer, dust is carried in with the draft. The sketches below illustrate ways of protecting front entrances of the farm home.

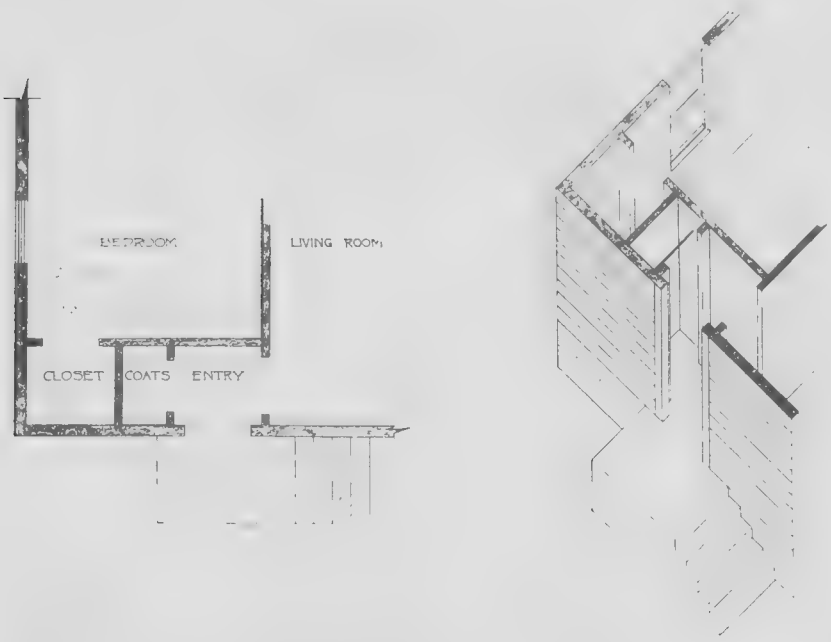
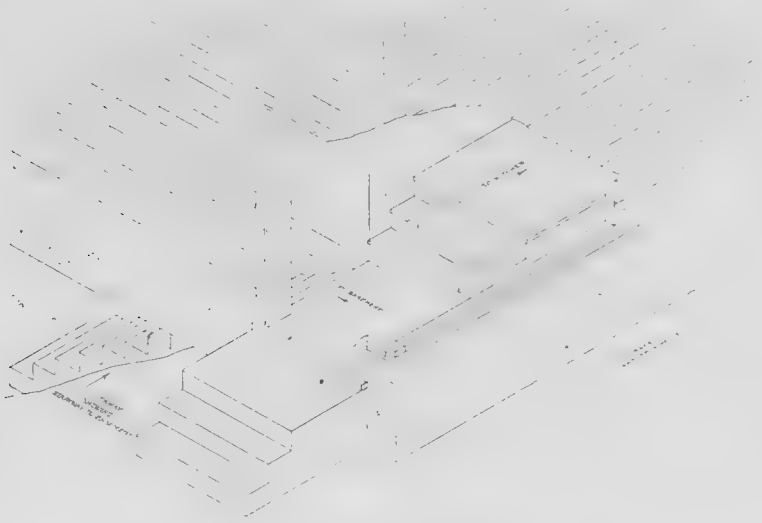
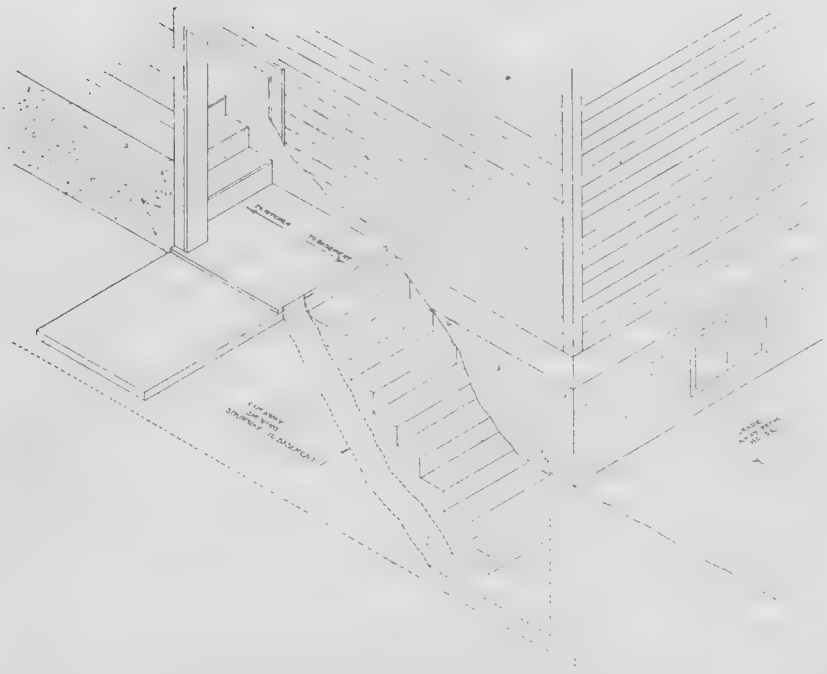


FIGURE 8—Protected Front Entrance.



PERSPECTIVE SHOWING
GRADE ENTRANCE
AT CORNER OF HOUSE

FIGURE 9—Grade Entrance—Corner.



GRADE ENTRANCE
FROM
SIDE OF HOUSE
TO
KITCHEN & BASEMENT

FIGURE 10—Grade Entrance—Centre.

The back door of the farm home may be better described as the service entrance. This term implies something different from the back door that so often opens into the kitchen. The service entrance provides indirect entrance into the home. Such an arrangement protects the house from cold winds, dust and snow. It should be located so that one may go down to the basement, into the kitchen, into the utility room, to the hallway leading to bedrooms whether on the first or second floor, or to the wash room or bathroom without passing through other rooms. The service entrance is actually the "hub" of the house.

A conveniently located cupboard near the service entry can hold men's work clothes, the family's everyday clothes and footwear, the children's outdoor wraps, and saves much dirt being carried into the house.

There should also be a cupboard near this entrance to receive milk, eggs, garden produce, groceries, etc., which are later cared for and stored away in an appropriate place. The floors of the entrances are subjected to hard wear, and will need constant cleaning. Durable, easily cleaned non-slippery surfaces are the best. Good quality linoleum or more expensive asphalt tile will be found very serviceable, and durable.

Section IV

THE FARM KITCHEN

The kitchen was discussed in a general way in the section dealing with Work Areas in the farm home. Since the women folk spend the greater part of the day in the kitchen, it is important to give much time and thought to its exposure, its relation to other parts of the house, as well as to the farmstead plan.

A satisfactory arrangement for one person may not be for another, but all will agree that a kitchen should have:

—ample light during the day and after dark. For safety the housekeeper needs her range and work counters well lighted and free from glare. Too little light or glaring light strains the eyes and tires the worker unduly. A great many accidents are due to poor lighting.

—ample storage space (See figure 11, page 25).

—ample work surfaces at suitable height for the person working at them. These surfaces should be durable, easily cleaned, and kept in good repair. (See Table of Heights for Working Surfaces, page 27).

—its equipment at definite work areas free of interference by cross traffic to other parts of the house. These work areas should be neither a play room for the children, nor a work shop for the men and boys who wish to make minor repairs. (See Figure 13, page 26).

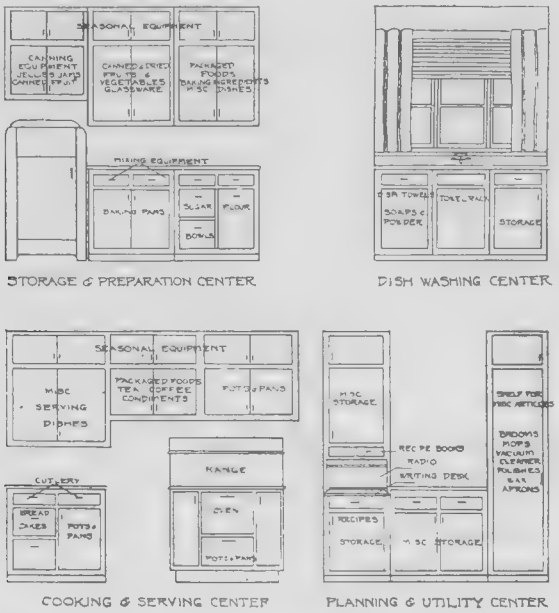
—a water supply from a tap or pump conveniently located in the kitchen. (See Figure 12, page 26).

—a kitchen sink with a pipe carrying away waste for safe disposal.

—a place for keeping at least a day's supply of fuel near the stove.

—a cooking area sufficiently large to meet the needs of the housewife when extra help arrives during the busiest seasons.

—a colour scheme which is cheery, bright, and pleasing. It is important to use the best quality paints that will stand repeated washings.



Lower cut—Courtesy Morgan Co., Oshkosh, Wis.

FIGURE 11—Photographs of Kitchen Storage Cabinets, Etc.

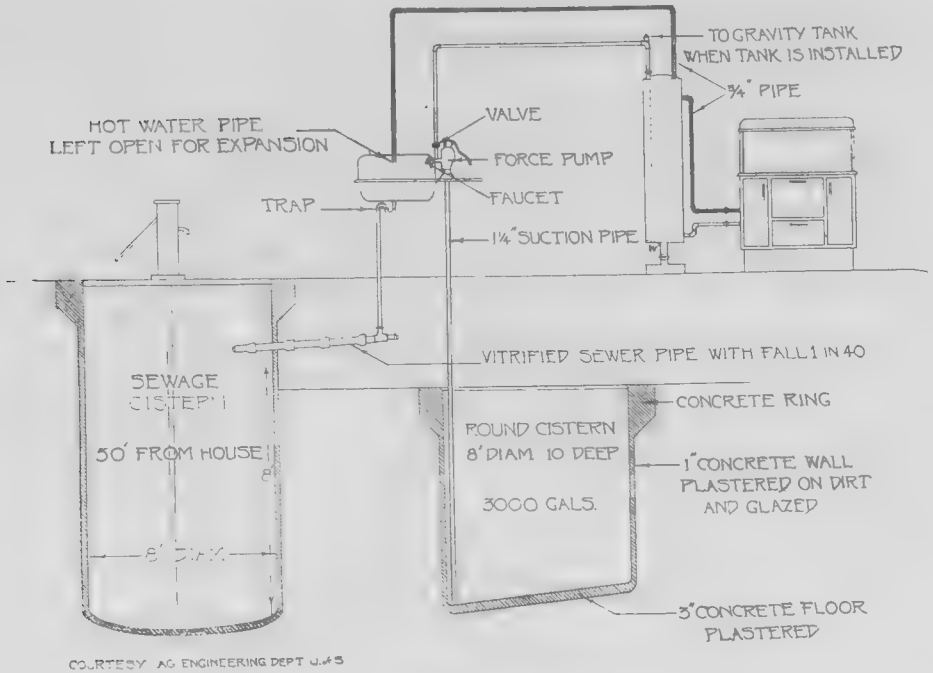


FIGURE 12—Water Supply in the Kitchen.

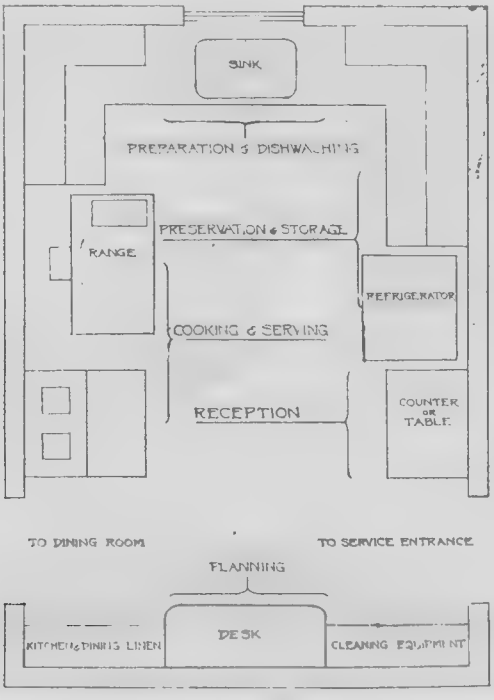


FIGURE 13—Kitchen Arrangement according to Work Centres.

TABLE III: Standard Heights for Working Surfaces

Height of the Worker	Height of sink from floor to bottom of sink	Height of other working surfaces for standing
5 feet	29½ inches	31½ inches
5 feet, 1 inch	30 inches	32 inches
5 feet, 2 inches	30½ inches	32½ inches
5 feet, 3 inches	31 inches	33 inches
5 feet, 4 inches	31½ inches	33½ inches
5 feet, 5 inches	32 inches	34 inches
5 feet, 6 inches	32½ inches	34½ inches
5 feet, 7 inches	33 inches	35 inches
5 feet, 8 inches	33½ inches	35½ inches

Kitchen Equipment

In order to have an attractive, convenient kitchen, meeting all the standards previously stated, the following equipment is required:

—lighting equipment properly located

—water supply

—system for disposing of wastes

—kitchen cupboards (built-in type to ceiling preferred)

—work counters

—convenient supply of fuel near the range.

—some form of cool storage, refrigeration, or a dumb waiter that lowers into a cool basement.

Kitchen Arrangement

It is important for anyone to have good tools suited to the job. It is equally important to arrange tools and equipment for the greatest convenience for the person working with them. Studies have been made of the various jobs that are done in the kitchen. Some of these are listed:

—Supplies from outside are brought in to the kitchen at various times. A counter or table in the service entry or in the utility room close to the kitchen is a very handy place to put these things. From here these supplies are either prepared for immediate use or are stored in an appropriate place.

—Cleaning up after meals. The kitchen sink with spacious counters on each side and a convenient supply of hot and cold water are the first time and energy savers. Having the dishpan soap and cleaning supplies within reach of this area is the next step in good planning. If cupboards for the clean dried dishes are to the left of the sink, time is saved in putting things away. If these cupboards are close to the dining area, less effort is required. Spaces for cooking utensils should be provided for storage within easy reach of stove and sink.

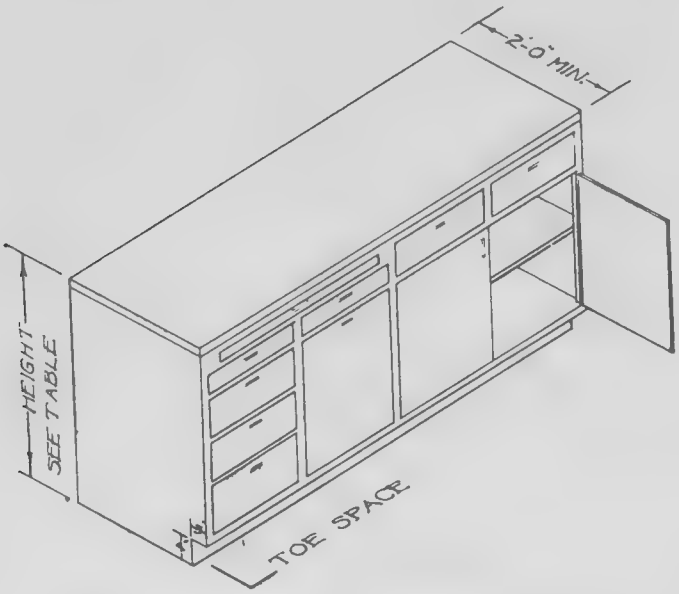


FIGURE 14—Toe space under Kitchen Counters.

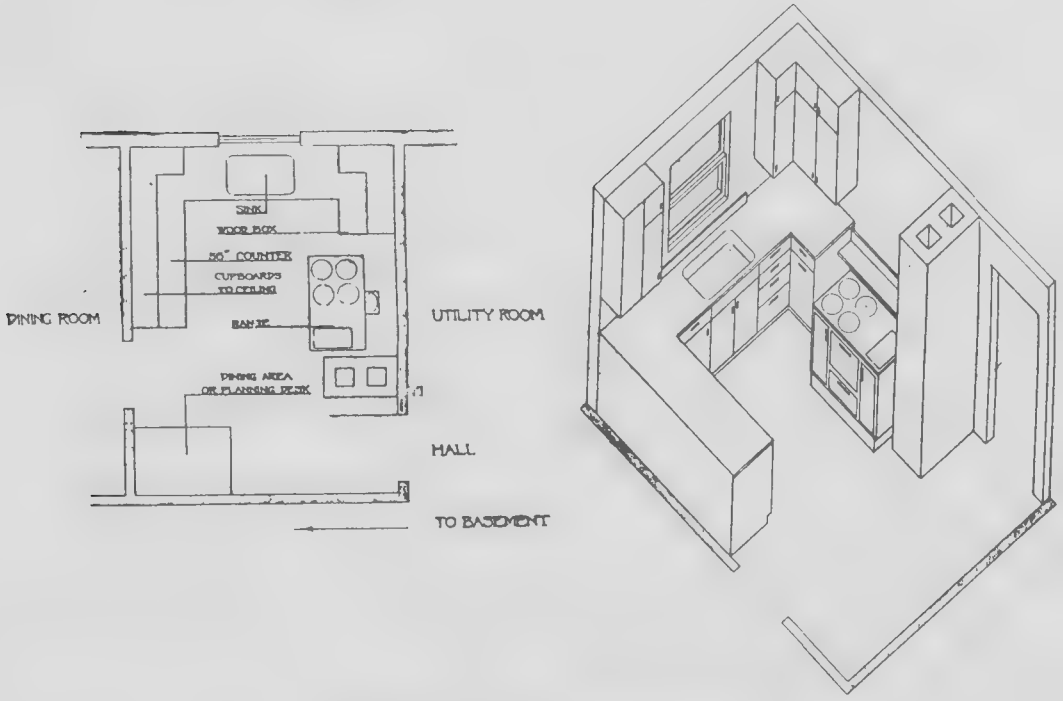


FIGURE 15—"U" Type Kitchen Design.

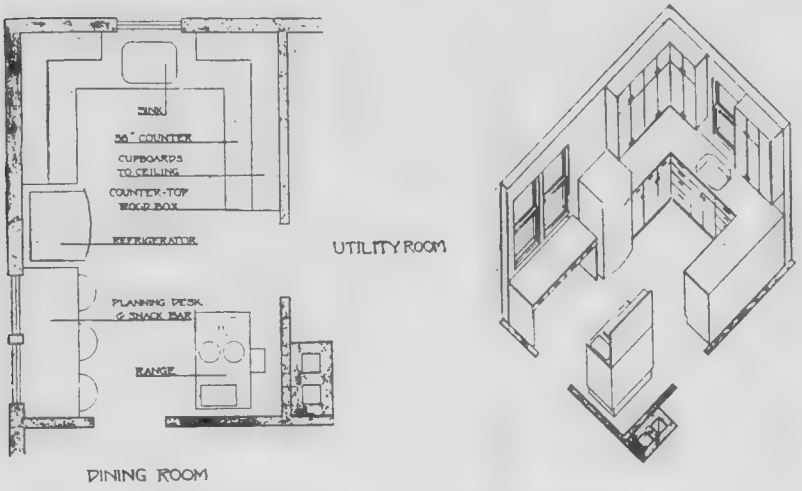


FIGURE 16—Broken "U" Type Kitchen Design.

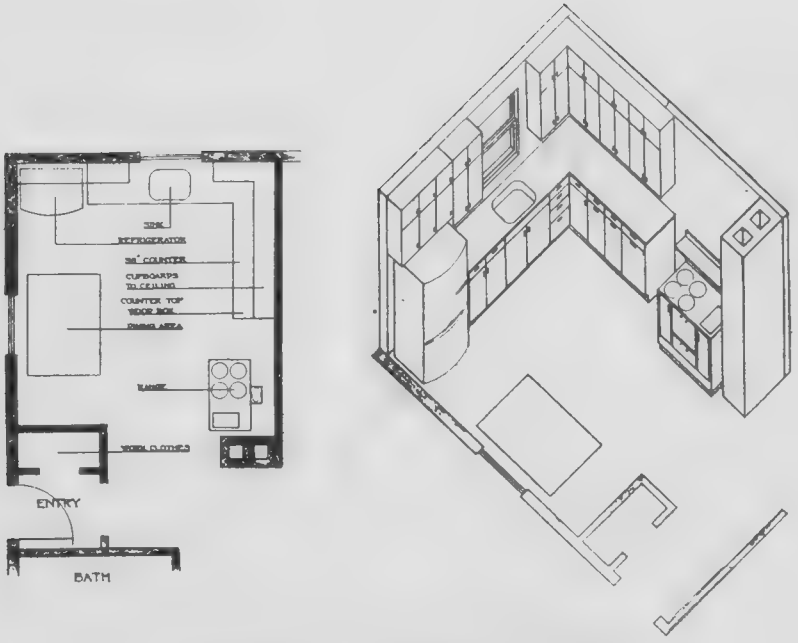


FIGURE 17—"L" Type Kitchen Design.

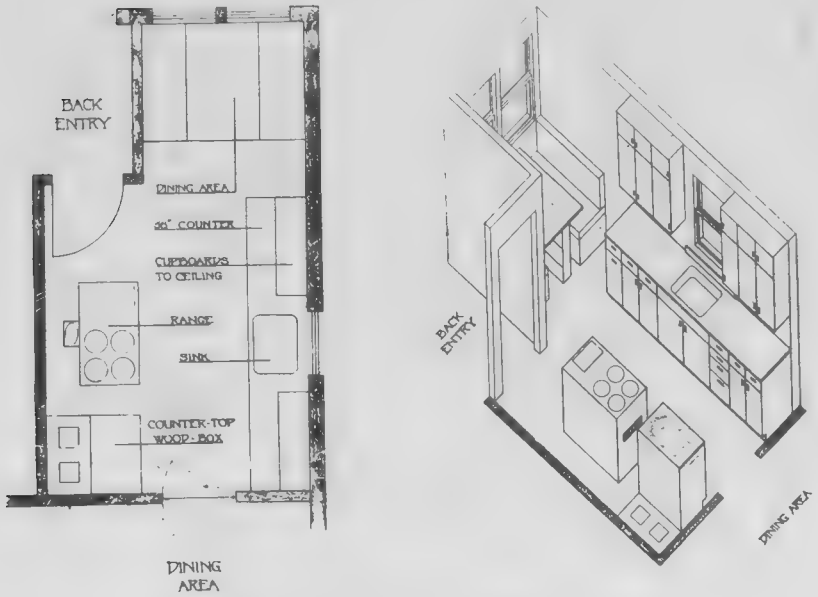


FIGURE 18—Corridor Type Kitchen Design.

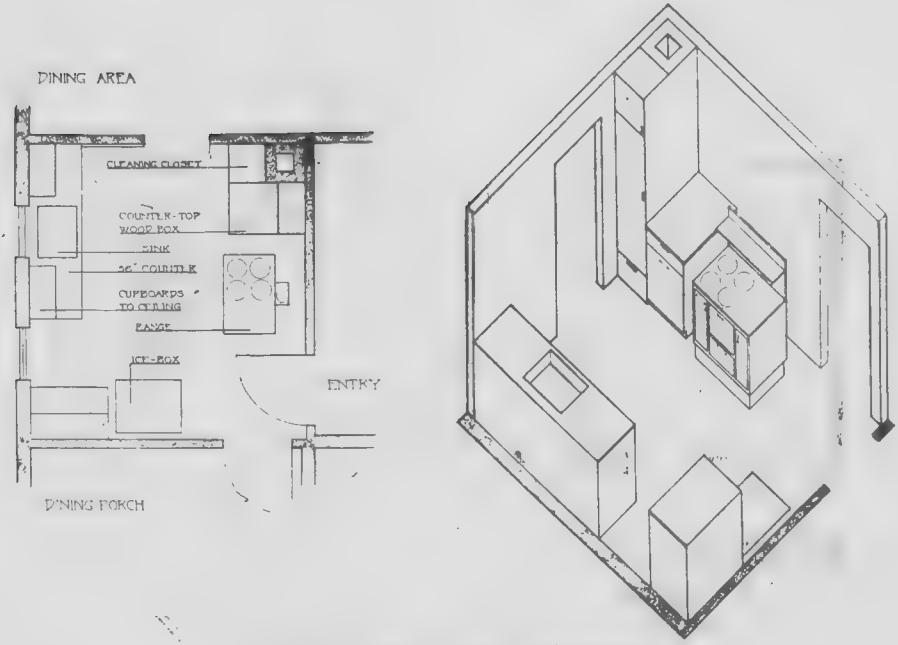


FIGURE 19—Single Centre Kitchen Design.

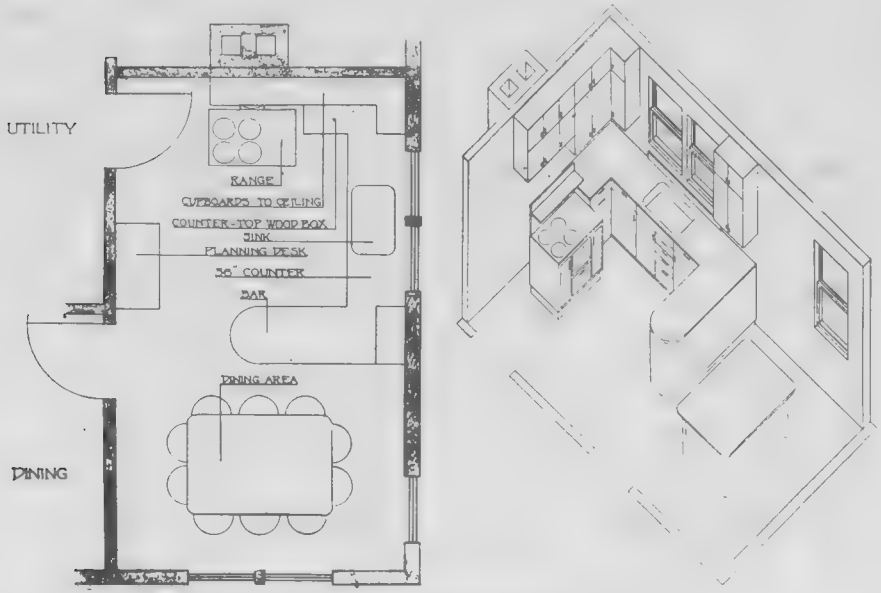


FIGURE 20—Large Kitchen with Dining Area.

THE UTILITY ROOM OR WORK ROOM.

A utility room or work room fills a definite need in the farm home. It should be easy to reach from the kitchen and from the service entrance, preferably on the same floor as the kitchen.

The utility room may be used for one or more of the following jobs:

a. the family wash
b. ironing
c. receiving supplies, such as eggs, milk, vegetables, meat, fruit, groceries, etc., which will be used immediately or stored in appropriate places.
d. separating the milk
e. washing dairy utensils
f. canning.

Often a wash-up corner for the men is included in this room. Closets for work clothes and footwear should be provided in the utility room or service entrance.

Where space allows, a shower may be included in the wash-up area of the utility room. Men enjoy a shower after a hard day's work and it is popular with the children. The housewife is saved the work of constantly cleaning the bathroom, if the men and children have a shower to use.

The floor of the utility room should be durable and easily cleaned. A concrete floor will stand hard wear and will not be affected by repeated washings (1). Floors covered with a good quality linoleum-type covering have proven very satisfactory. With reasonable care, it will last for a number of years.

If a utility room is used for separating milk, washing the dairy utensils and as a laundry room, a floor drain should be installed.

(1) The manufacturers of Portland Cement will supply information on the making of good concrete.

The placement and size of the windows is important. Adequate light and ventilation are necessary.

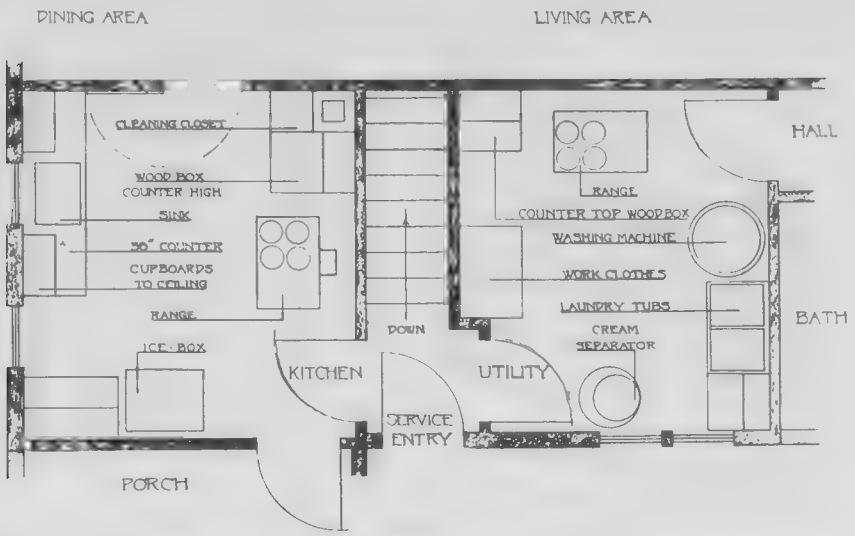


FIGURE 21—The Utility Room is considered essential in the farm home. This drawing shows a kitchen and utility room with the stairs to the basement conveniently located.

THE BASEMENT OF THE FARM HOME

In the Prairie Provinces, good construction requires adequate footings and foundation walls to withstand possible damage from frost, or water, or both. For this reason, it is usually necessary to spend a considerable amount of money excavating, building forms, and pouring concrete. It seems reasonable, then, to put the space enclosed by the foundation walls to the best possible use.

The trend now is to build the foundation walls higher out of the ground in order to have large windows to bring sunlight into the basement. This desire to have bright, airy rooms in the basement conflicts with other features. The higher the foundation, the more steps there are to climb when entering the house. Few will object to climbing six or seven stairs to the front door, but this may be considered objectionable in the case of the service entrance, or back door.

It is a case of personal preference. The family will decide which will meet their needs better—to have a great deal of useful space in the basement, or to have the house built close to the ground to avoid too many outside stairs.

The basement of all farm homes should contain a furnace, and a bin for the storage of fuel. In addition, rooms or cupboards may be built for the storage of fruits and vegetables, dairy products, eggs, meat, canned foods, empty sealers, etc. Generally speaking, space remains that could be used for one or more of the following:

milk room — wash room — hobby room — dark room for the family photographer — a play room for the children — a recreation room for all the

family — a den or office which may serve as an extra bedroom — a laundry room — or a utility room.

In order to get the greatest use out of the basement, it must be well lighted and ventilated. It should have a clearance from the floor to the underside of the joist of at least seven feet. More clearance would be better, but of course, it is wise to consider the extra cost.

Choose the north side of the basement for the storage of perishables. Locate the fuel bin where it will be handy for filling the furnace. It should not use up space that is well lighted from the south, east, or west windows. This area should be saved for the work or recreation room. (See figures 22 and 23).

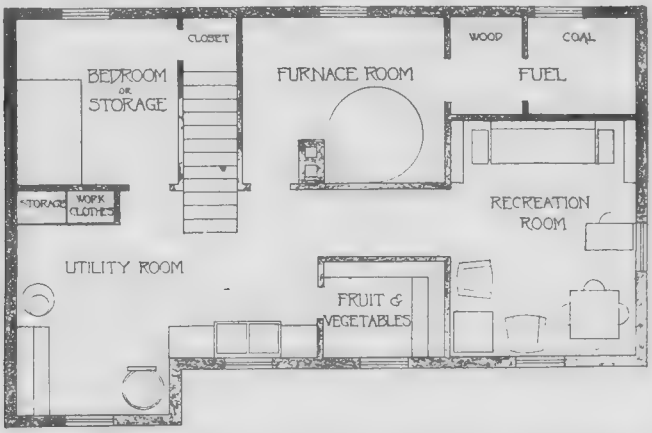
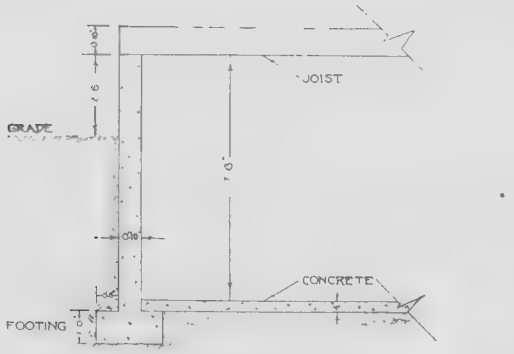


FIGURE 22—The space in the basement should be used to the best advantage. This drawing suggests how a basement may be laid out. (See plan 5 on page 46).



SECTION SHOWING
BASEMENT CLEARANCE
AND
HEIGHT OF FOUNDATION ABOVE GRADE

FIGURE 23—Basement showing clearances, footings, etc.

Section V

PLANNING THE FARMSTEAD

A site should be chosen that will afford sufficient room for all the buildings that make up the farmstead. Once the foundations are in, it is next to impossible to make any changes. When making a choice consider the following points:

Water supply for the farmstead
Soil and drainage of the farmstead
Size of the site
Protection from wind
Roads and highways
Telephone lines and mail routes
Power lines
Laying out the farmstead

Water Supply for the Farmstead.

The water supply is of prime importance. The supply should be adequate and near the farmstead.

The source may be a well, a stream, a cistern in which rain water is stored, or a dugout located so as to collect the run-off from rain and snow. When water from dugouts is to be used for domestic purposes, the dugouts should be fenced and a filter must be installed as a safeguard of the family health. (See bulletin "Safe Water Supplies" obtainable from Division of Sanitation, Department of Public Health, Regina, Saskatchewan.)

Its suitability and safety for domestic use should be definitely known. Water is tested free of charge. Write to the Sanitation Division, Department of Public Health, Regina, Saskatchewan, for container and instructions.

A water supply in the farm house, particularly in the kitchen, is one of the first conveniences that should be provided. (See List of Selected References for bulletins on Water Supply and Sewage Disposal and Plumbing. Page 60).

Soil and Drainage of the Farmstead.

The kind of soil on which the house and other buildings are built is a point to consider. Shelter belts of trees, areas of grass and the gardens will require good soil if these are to be successful. If water is available to supplement the rain, then a lighter soil may be desired as it is more readily handled.

The farmstead site should be chosen where water does not accumulate. Topography is an important consideration. Dry yards safeguard the health of the family and of livestock. Dry yards save the housewife a great deal of work. Less dirt is carried into the house and children's clothes stay clean longer.

Size of the Site.

The amount of land needed for the farmstead will vary a great deal. On power farms where only grain is produced a minimum number of buildings is required. In other parts of the country where more diversified farming is carried on, more buildings and larger yards are necessary. Barns for horses and cattle, poultry houses, piggeries, granaries, and other buildings make up the farmstead.

To be convenient, the farmstead should be reasonably compact to save undue walking from one job to another. On the other hand, room should be provided to permit spacing of buildings far enough apart to give protection against fire. It is also important to leave sufficient room in the yards for easy handling of machinery, trucks, wagons, and tractors.

The farmer's wife will appreciate having the vegetable garden and poultry house near at hand. The family will appreciate having the barn and piggery and the yards surrounding them, some distance from the house to avoid unpleasant odors being carried into the house.

Protection from Wind.

The importance of securing shelter from the wind has been mentioned. Natural features should be utilized if such exist, otherwise windbreaks may be planted. On some farms these have been planted along contours. A contour is followed, as far as practical, so that run-off rains and snows will provide as much moisture as possible to maintain the trees and encourage strong, rapid and uniform growth. (See Figure 30, page 40).

Kitchen and bedrooms especially require good ventilation and advantage should be taken of summer breezes. The direction of the prevailing winds should be considered, and the home built where unpleasant odors will not reach the house.

Plantings of shrubs or the erection of snow fences at strategic points will help keep the lanes and yards clear of drifting snow. At the same time, moisture will be provided for gardens, trees and grass.

Roads and Highways

Where possible, the farm home should be near the highway, or a good all-weather road. Communication with neighbours, schools, churches, the village, town or city is made easier. There was, at one time, a tendency to build the farmstead in the centre of the property so fields could be reached with as little loss of time and effort as possible. Now, with modern tractors, it is only a few minutes' run to the fields from the house. A short lane leading to the yards is more easily kept in good shape with a few loads of gravel or cinders than one extending deep into the farm.

Telephone Lines and Mail Routes

When planning to build it is worthwhile to consider public utilities such as telephone lines and rural mail routes already serving the country—or the route they will follow when these services are provided. A farmstead should be located so that as few poles as possible are required to bring the telephone service to the house. Savings are made since the initial cost of installation and maintenance is low.

Power Lines.

If electric power is available from a central station the farmstead should be built where this service can be had with as little cost as possible. Poles and long lead-in wires are expensive. From time to time poles have to be replaced at a cost which should be considered. If neighbours are close enough together one transformer will serve several farmsteads, and the initial cost of installation will be shared by a group and thus be less burdensome to the individual farmer.

When you build, find out the possibility of having electric power in the district. Wiring for electric service is less costly if done while the house is being built.

Laying out the Farmstead.

When a desirable site for the farm buildings has been chosen, the next step is to plan the location of the buildings, driveways and yards. This should be done in a systematic way. The steps in preparing a plan are as follows:

1. Measure the site either by pacing off the distance or by means of a good tape.
2. Mark off a line A B. See Figure 24.
3. On the line A B mark off the point C, which is the distance you wish your house to be from the highway.
4. The next point to mark is D. The distance from C to D will vary according to your needs, and will depend upon the amount of land you wish around the house for yards, trees, lawns, and gardens.
5. The farmstead area is now divided into six rectangles as shown in Figure 24. On your plan show important features such as:
   a. Direction of prevailing winds
   b. Direction of winter winds
   c. Any trees that are growing on the site.
   d. Water supply—well, dugout, stream or lake.
6. Decide in which of the rectangles you wish to have your house, gardens, lawns, orchards, shed, farm shop, barn, piggery, poultry house, and granaries. See Figure 25 which suggests a farmstead layout for a mixed farm north of the road allowance and the prevailing winds from the southwest.

Figures 26, 27, 28, and 29, suggest other farmsteads, planned for various types and locations of farms.

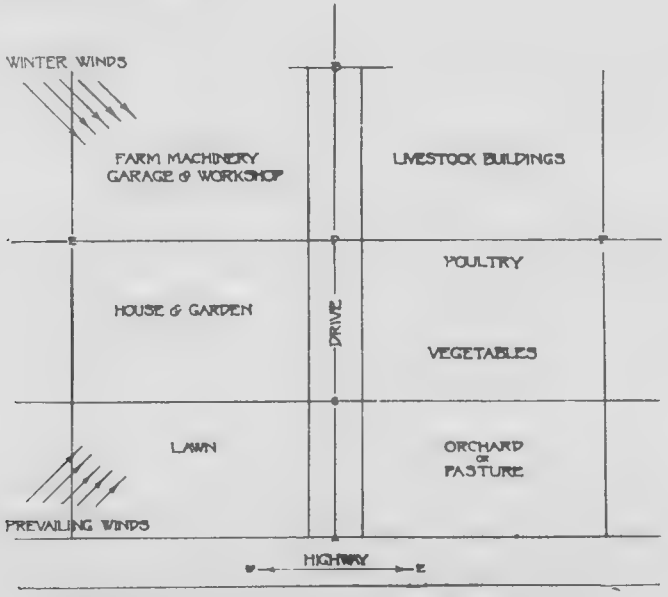


FIGURE 24—Laying out of a Farmstead—1st step.

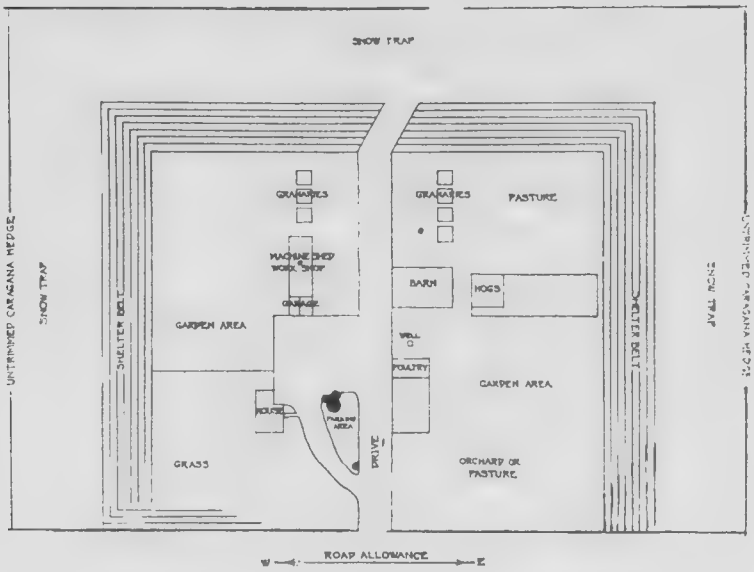


FIGURE 25—Laying out of a farmstead—2nd step.

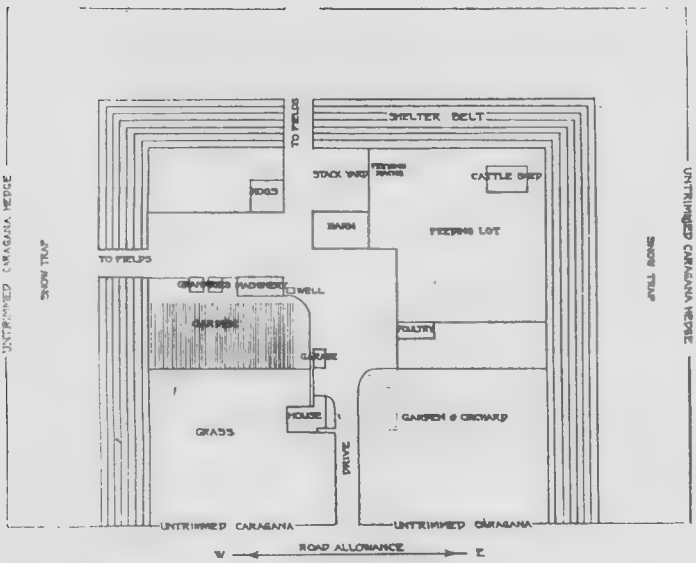


FIGURE 26—Farmstead Plan—North of the Highway.

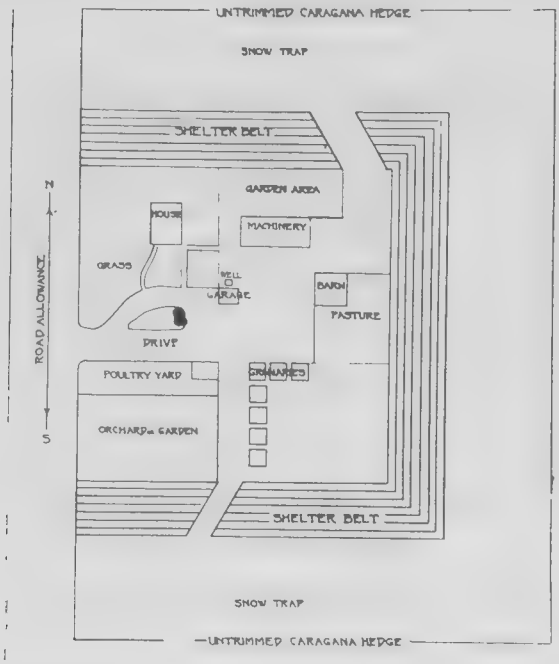


FIGURE 27—Farmstead Plan—East of the Highway.

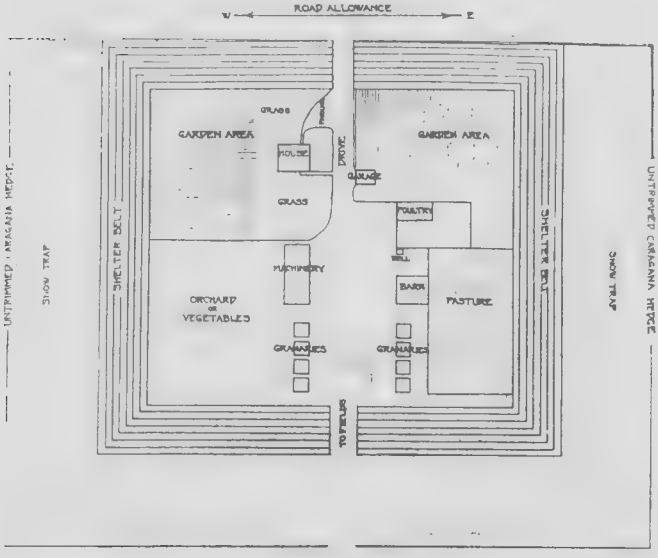


FIGURE 28—Farmstead Plan—South of the Highway.

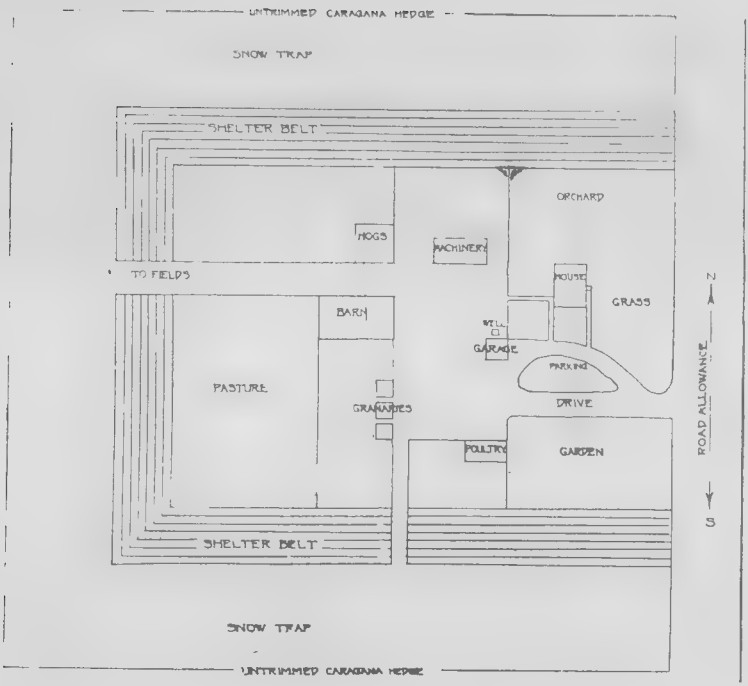


FIGURE 29—Farmstead Plan—West of the Highway.

FIGURE 30—Photographs of Contour Planting.

Photo Courtesy U.S. Soil Conservation Service.

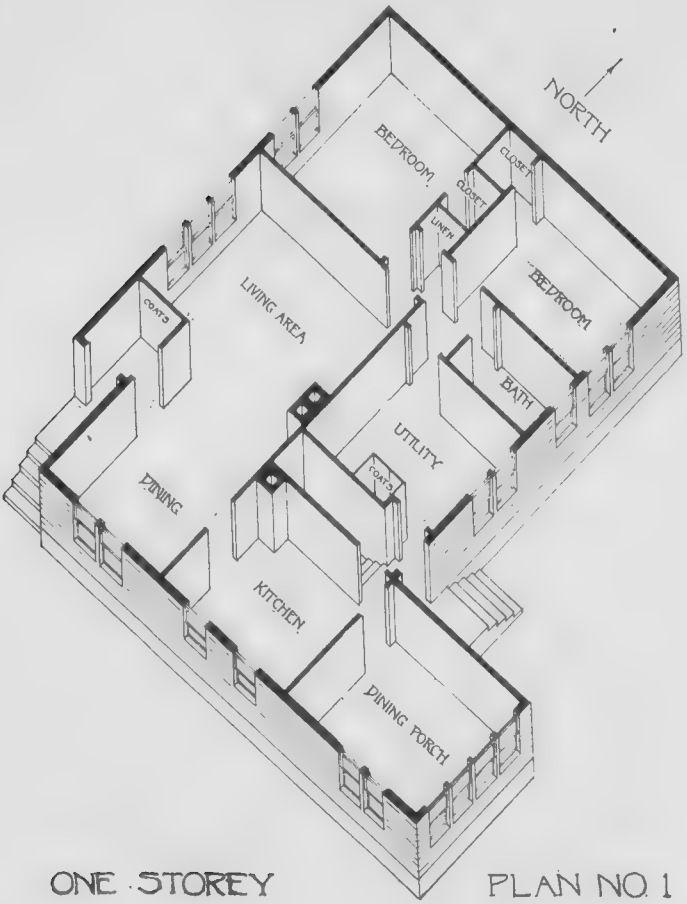
Section VI

HOUSE PLANS

In the foregoing sections of this bulletin an effort has been made to suggest to the prospective home builder some of the considerations and principles involved in planning the farm home for maximum efficiency and comfort. In the plans which follow an attempt has been made to illustrate these principles.

Plan No. 1

ONE STOREY



Room Sizes:

Living room	18′-0″ x 15′-0″
Kitchen	10′-8″ x 11′-10″
Dining area	8′-2″ x 10′-6″
Dining porch (optional)	10′-8″ x 12′-0″
Utility room	10′-0″ x 11′-8″
Bedroom—N.E.	9′-0″ x 12′-0″
Bedroom—N.W.	12′-6″ x 11′-0″
Bathroom	5′-0″ x 7′-3″
Over-all dimensions (without porch)	40′-0″ x 28′-0″

Features:

1. The service entrance and the rear hall make it easy to reach any part of the house.

2. The protected front entrance contains a place for coats and footwear. It is only a few steps from the kitchen.

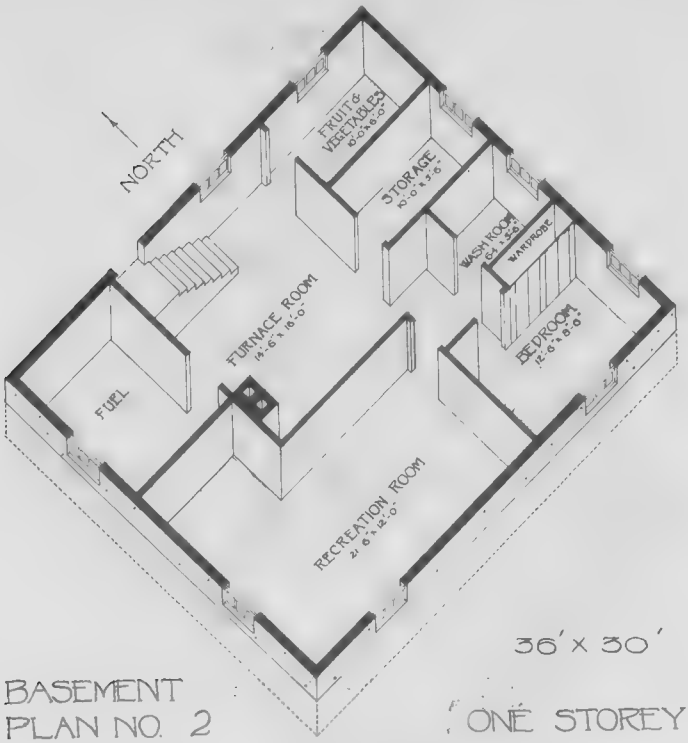
3. See Figure 19, page 30, for suggested kitchen arrangement for this home.

4. On the farm, a work room in addition to the kitchen is a great convenience. A utility room is provided in this plan. See figure 21 on page 32. A chimney is placed so that a stove could be used in this room.

5. The stairs to the basement are conveniently located near the service entrance, the kitchen and utility room.

Plan No. 2

ONE STOREY



Room Sizes:

Living-dining	23′-0″	x	14′-8″
Kitchen	9′-6″	x	14′-0″
Dining Area	In Living Room		
Utility room	13′-2″	x	14′-0″
Bedroom—N.E.	11′-8″	x	10′-0″
Bedroom—S.E.	11′-8″	x	10′-0″
Bathroom	8′-0″	x	5′-6″
Over-all Dimensions	36′-0″	x	30′-0″

Basement:

Recreation room	21′-6″	x	12′-0″
Bedroom	12′-6″	x	8′-6″
Furnace room	14′-6″	x	16′-0″
Fuel room	9′-2″	x	10′-10″
Fruit storage	10′-0″	x	6′-0″
Storage	10′-0″	x	5′-6″
Washroom	6′-4″	x	5′-6″

Features:

1. The grade entrance in this plan serves the kitchen, utility room and basement. This type of service entrance is becoming more and more popular.

2. One double flue chimney serves the furnace and the kitchen range. It could also be used if a stove is needed in the utility room.

3. The dining area in the combination living-dining room is conveniently located with respect to the kitchen.

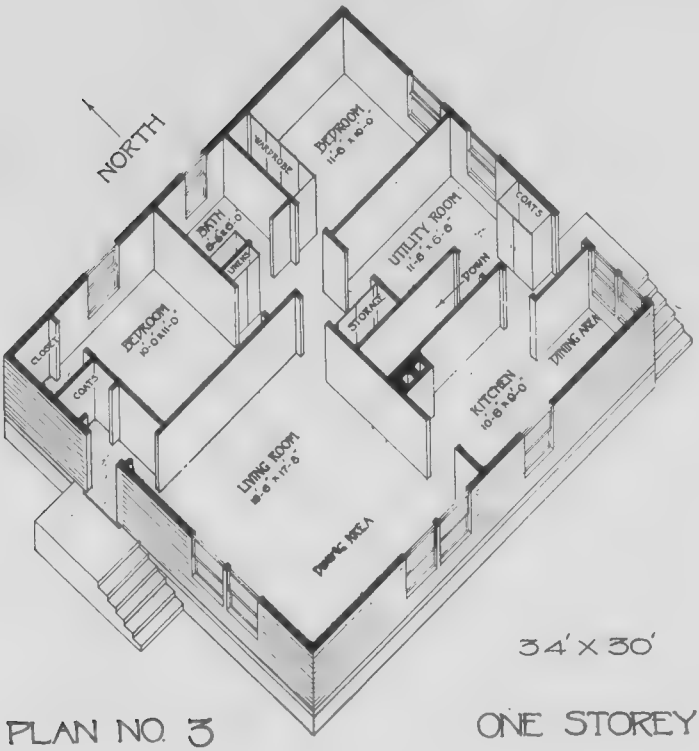
4. The basement plan of this house provides storage rooms near the stairs. The furnace room and fuel bin are conveniently located.

5. The large recreation room in the basement is well lighted with south and west windows. This could be easily the most popular room in the house.

6. The wash room and the bedroom in the basement provide a solution to the problem of making room for a guest or a hired man in a one storey home, or the room might be used as an office.

Plan No. 3

ONE STOREY.



Room Sizes:

Living-dining combination	16′-6″ x 17′-8″
Kitchen	10′-6″ x 9′-0″
Dining areas	In kitchen and living room
Utility room	11′-6″ x 6′-6″
Bedroom—N.E.	11′-6″ x 10′-0″
Bedroom—N.W.	10′-0″ x 11′-0″
Bathroom	6′-8″ x 6′-0″
Over-all Dimensions	34′-0″ x 30′-0″

Features:

1. This is a very compact plan. The small central hall makes all rooms easily accessible.

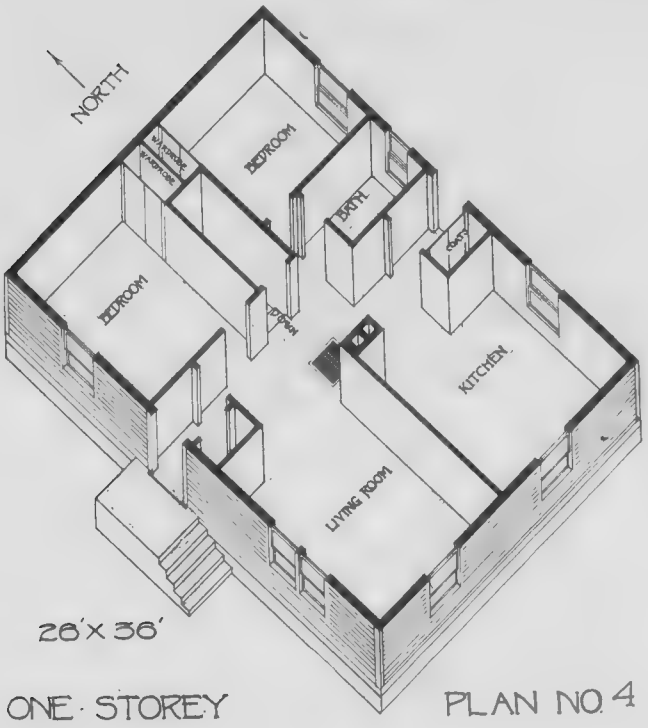
2. The utility room will prove very handy as a place for the cream separator, for the laundry equipment and for work clothes and footwear.

3. Two dining areas are convenient to the kitchen. Both are bright and well lighted by either east or south windows.

4. The stairway to the basement is convenient to the kitchen, the utility room, and the rear entrance.

Plan No. 4

ONE STOREY



Room Sizes:

Living room	12′-0″ x 21′-6″
Kitchen	12′-8″ x 19′-0″
Dining area	In kitchen
Bedroom—N.E.	10′-9″ x 10′-4″
Bedroom—N.W.	10′-9″ x 13′-2″
Bathroom	7′-0″ x 5′-0″
Over-all Dimensions	26′-0″ x 36′-0″

Features:

1. This compact house will be easily kept in good order. No room serves as a passageway to another room.

2. The vestibule at each entrance protects the house from cold drafts, snow or dust. The built-in cupboards are convenient for coats and footwear.

3. The kitchen is large and easily arranged. In arranging furnishings it is suggested that the dining area should be near the east window. (See figure 17 page 29).

4. A pipeless hot air furnace would serve this house well. The register could be located in the central hall as shown on the plan. (A cabinet type circulating heater might be used instead of a furnace).

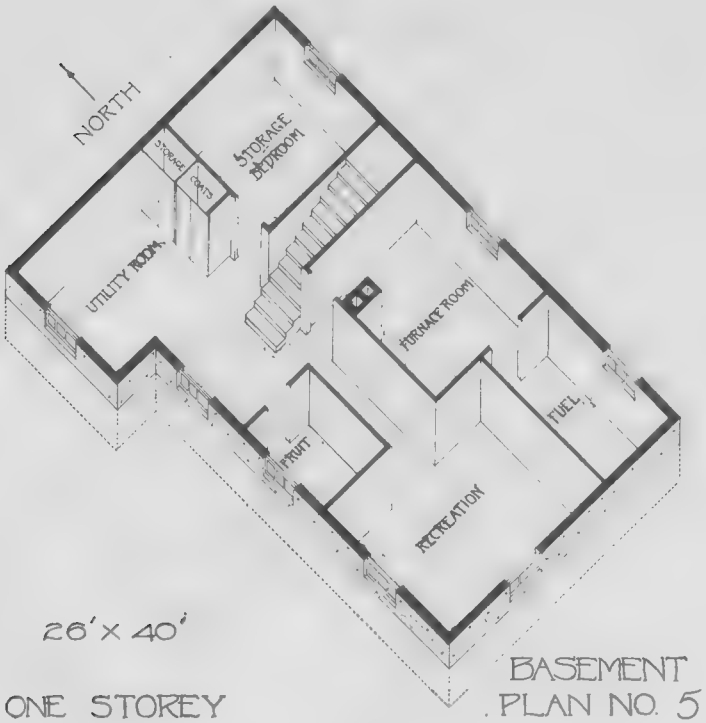
5. The bathroom is well located with respect to the rear entrance, the kitchen and the bedrooms.

6. Stairs to the basement are handy to the kitchen as well as to the service entrance.

7. A compact plan such as this keeps costs down.

Plan No. 5

ONE STOREY.



Room Sizes:		*Basement:*	
Living-dining	21′-0″ x 12′-0″	Recreation room	14′-0″ x 12′-0″
Kitchen	10′-6″ x 12′-6″	Storage or bedroom	10′-2″ x 9′-8″
Bedroom—N.E.	10′-6″ x 10′-0″	Furnace room	10′-2″ x 12′-2″
Bedroom—N.W.	10′-0″ x 10′-0″	Fuel room	6′-0″ x 12′-0″
Bathroom	6′-0″ x 8′-4″	Utility room	Various
Over-all Dimensions	26′-0″ x 40′-0″	Fruit storage	6′-0″ x 7′-6″

Features:

1. In this plan the combination living-dining room is of a size and shape that will permit entertaining a large group. Ample space is provided for furniture.

2. The front entry is spacious enough for coats and footwear and will protect the house against drafts, dust, and snow.

3. The bathroom is conveniently located with respect to the kitchen, the two bedrooms, and the service entrance.

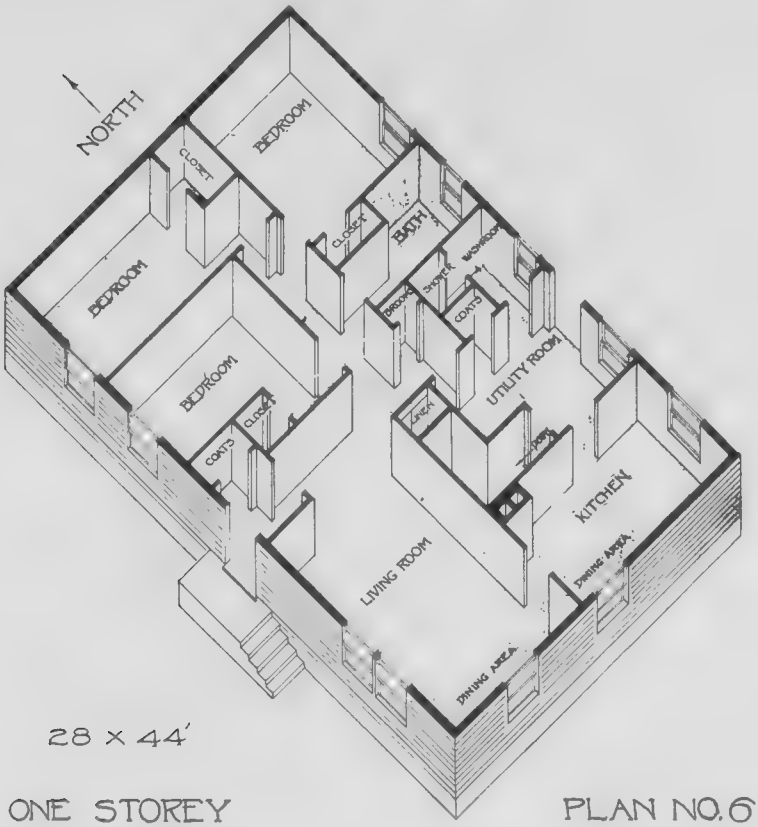
4. The stairs to the basement are placed near the rear entry and yet are handy to the kitchen. Work clothes and footwear could be left in the basement cupboards at the foot of the stairs.

5. In this plan, a utility room at the foot of the basement stairs and directly below the bathroom is convenient.

6. The plan is readily converted to a 1½ or 2 storey house by putting stairs up over the basement stairs. If this was done the N.E. bedroom could be utilized as a work room if desired.

Plan No. 6

ONE STOREY



Room Sizes:

Living-dining combination	22′-10″ x 12′-0″
Kitchen	14′-8″ x 9′-0″
Bedroom—N.E.	12′-2″ x 10′-0″
Bedroom—N.W.	16′-8″ x 8′-6″
Bedroom—West	12′-0″ x 11′-0″
Dining Areas	In kitchen & living room
Utility room	11′-0″ x 8′-9″
Bathroom	10′-0″ x 6′-0″
Over-all Dimensions	44′-0″ x 28′-0″

Features:

1. This one storey home provides three bedrooms, a spacious living room and ample work space.

2. A very convenient feature in this home is the wash room and shower near the utility room in addition to the bathroom.

3. One double flue chimney serves the kitchen and heating equipment in the basement.

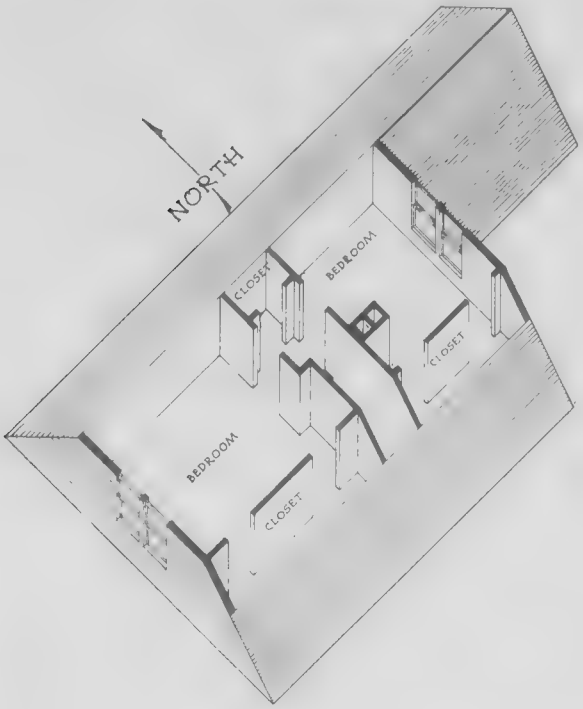
4. Ample space is provided for storage.

5. The stairs to the basement are well located in relation to the kitchen, the rear entrance and the utility room.

6. The basement of the house is large and should be used to the greatest advantage. (See "The Basement of the Farm Home", page 32).

Plan No. 7

STOREY-AND-A-HALF.



PLAN NO. 7 SECOND FLOOR STOREY-&-HALF

Room Sizes:

Living room	14′-4″ x 13′-0″
Kitchen (and sewing area)	17′-8″ x 10′-0″
Utility room	12′-6″ x 7′-0″
Office	6′-6″ x 7′-0″
Dining area (off kitchen)	9′-0″ x 7′-4″
Bedroom ground floor	9′-0″ x 11′-8″
Bedroom—second floor—east	10′-0″ x 12′-0″
Bedroom—second floor—west	12′-0″ x 14′-4″
Bathroom	7′-0″ x 5′-9″
Over-all Dimensions	42′-0″ x 26′-0″

Features:

1. This plan offers many features so often desired in a farm home—a good sized kitchen—separate dining room—utility room—and farm office. One bedroom and the bathroom are on the ground floor.

2. The front entrance and the service entrance are on the same side of the house. On some farms this is a very convenient arrangement.

3. The person in charge of preparing and serving meals will notice how those from outdoors may come in at meal time, leave their out-door coats and footwear out of the way, wash-up and then sit down at the dining table without entering the kitchen at that busy time just before a meal.

4. The utility room provides ample room for laundry equipment, dairy equipment, a cupboard for work clothes and footwear. There is room also for a wash-up corner for the men and children.

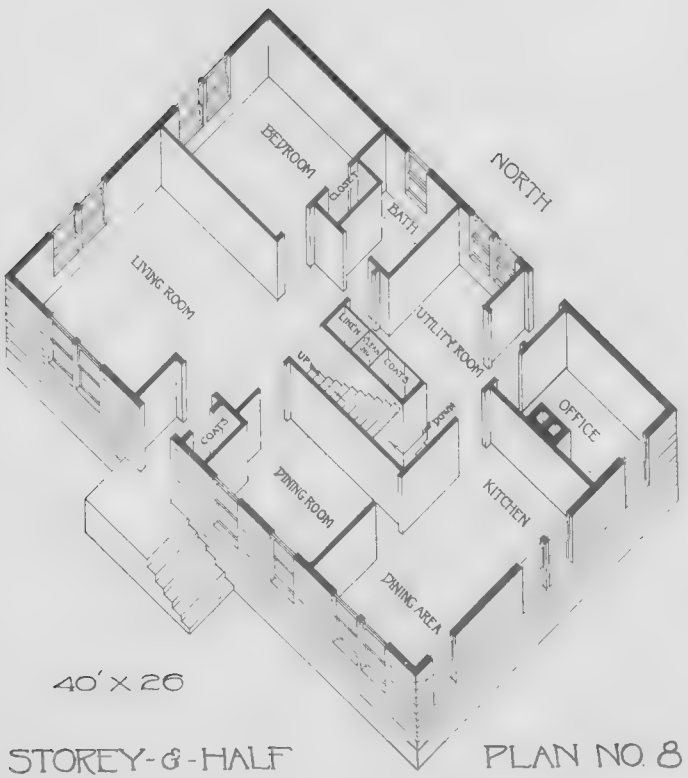
5. A separate room for keeping farm records and in which the men may talk over business matters is often dreamed about. Such a room is provided in this house. It is easily reached from the service entrance.

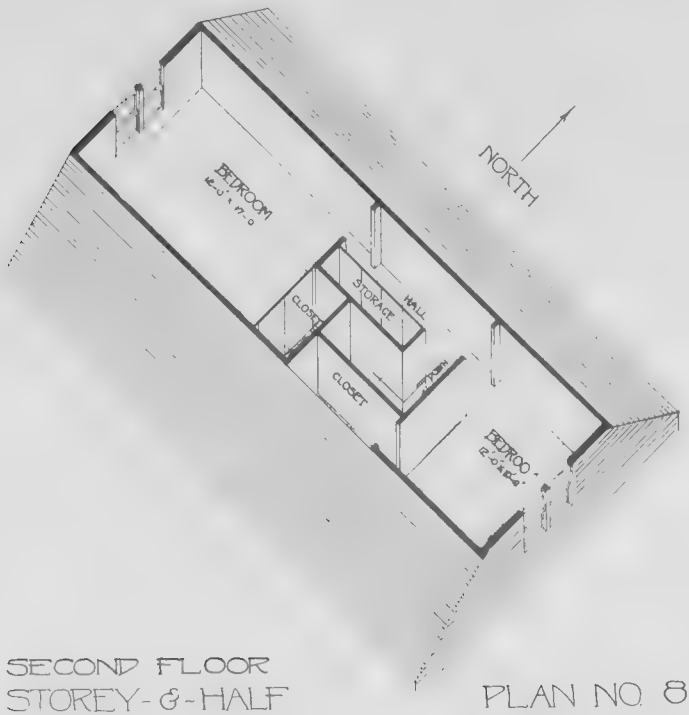
6. The kitchen is of such a size and shape that it may be planned along the lines of the corridor type as illustrated in Figure 18, page 30.

7. An outside entrance to the basement of this house would be convenient.

Plan No. 8

STOREY-AND-A-HALF





SECOND FLOOR
STOREY-&-HALF

PLAN NO. 8

Room Sizes:

Living room	17′-4″ x 14′-4″
Kitchen (and dining area)	18′-6″ x 10′-0″
Utility room	10′-4″ x 10′-0″
Office	6′-2″ x 10′-0″
Dining room	11′-0″ x 9′-0″
Bedroom—ground floor	11′-0″ x 10′-4″
Bedroom—second floor—west	12′-0″ x 17′-0″
Bedroom—second floor east	12′-0″ x 10′-0″
Bathroom	7′-0″ x 6′-8″
Over-all Dimensions	40′-0″ x 26′-0″

Features:

1. All parts of this home are easily reached from either the front door or the service entrance. (Take a pencil and trace your way from the service entrance to the office, the basement or to any part of the house.)

2. Both entrances are "protected entrances."

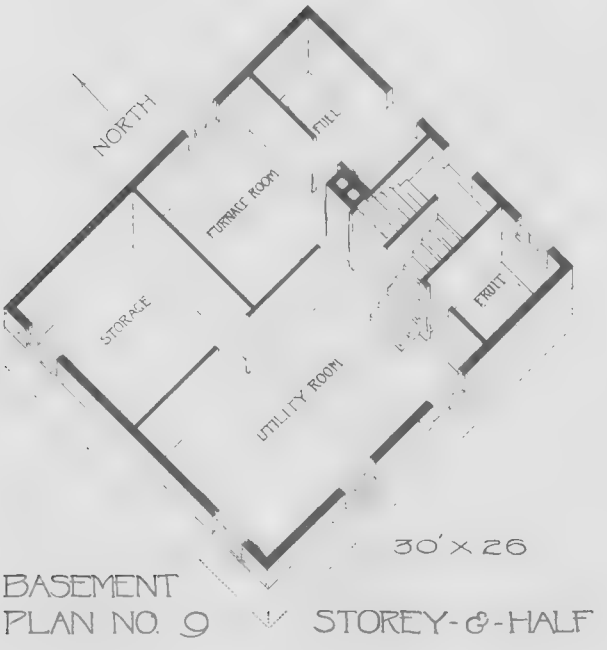
3. Note the cupboard spaces in the utility room, the bedrooms and the front vestibule.

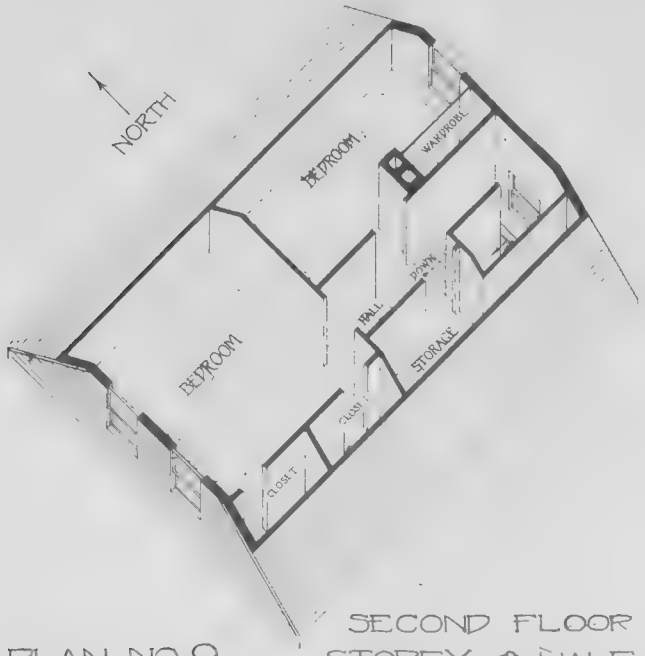
4. The kitchen is well lighted with south and east windows yet there is ample wall space for built-in cupboards. (See Figure 20 page 31).

5. Two dining areas are popular with some homemakers. Some might prefer changing the dining room. It could be a beautiful sewing room, the south windows would be a splendid place for house plants, as would the windows in the dining area of the kitchen.

Plan No. 9

STOREY-AND-A-HALF





PLAN NO 9 — SECOND FLOOR STOREY-&-HALF

Room Sizes:

Living room	17′-6″ x 12′-6″
Kitchen	14′-6″ x 12′-2″
Dining areas	In kitchen and living room
Utility room (in basement)	20′-8″ x 12′-3″
Bathroom	6′-6″ x 5′-9″
Bedroom — ground floor	12′-2″ x 10′-0″
Bedroom — second floor—east	15′-6″ x 8′-0″
Bedroom — second floor—west	14′-0″ x 13′-2″
Over-all Dimensions	30′-0″ x 26′-0″

Basement:

Storage room	11′-0″ x 11′-9″
Furnace room	11′-0″ x 11′-9″
Fuel room	5′-8″ x 11′-9″
Fruit storage	7′-4″ x 6′-0″

Features:

1. This compact storey-and-a-half home is designed to give the maximum liveability at low cost.

2. The service entry is of the grade entrance type. The stairs to the second floor are placed above the grade entrance to take up as little space as possible. This arrangement permits getting upstairs without having to build a dormer to gain headroom.

3. The numerous storage closets in the house will appeal to many homemakers.

4. A utility room for the laundry, cream separator, canning, cutting meat, etc., could be conveniently located near the basement stairs.

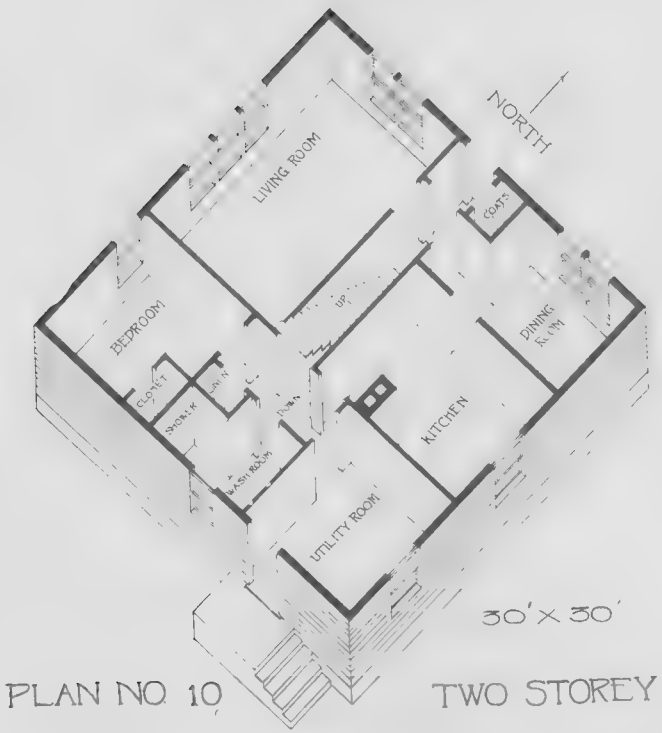
5. This plan complies with the principle that at least one bedroom and the bathroom should be on the ground floor in a farm home.

6. To some, a doorway may seem unnecessary in the east wall of the living room. This could be easily omitted.

7. Each bedroom on the second floor is large enough for two beds.

Plan No. 10

TWO STOREY.



PLAN NO. 10

Room Sizes:

Living room	18′-0″ x 12′-0″
Kitchen	9′-8″ x 13′-0″
Dining room	8′-0″ x 10′-3″
Utility room	10′-8″ x 10′-0″
Bedroom (ground floor)	10′-8″ x 10′-0″
Washroom	6′-0″ x 8′-4″
Bedroom—second floor—N.W.	18′-0″ x 12′-0″
Bedroom—second floor S.W.	10′-8″ x 8′-3″
Bedroom—second floor—N.E.	18′-0″ x 13′-0″
Bedroom—second floor—S.E.	10′-8″ x 10′-0″
Bathroom	6′-8″ x 8′-0″
Over-all Dimensions	30′-0″ x 30′-0″

Features:

1. One cannot study this plan without remarking on the amount of space there is in a 30′ x 30′ two storey house. Note the number of rooms and their generous dimensions.

2. Note the "farm features" in this plan: utility room, bedroom on the ground floor, a wash room and shower on the ground floor near the service entrance, and a good-sized living room.

3. In this five-bedroom house, one bedroom on the second floor could be used as a sewing room, or library. There is also the possibility of having one of these rooms furnished and cared for by the young members of the family as their own living room.

4. Figure 15, page 28, is a suggested plan of the kitchen of this house.

TABLE IV: Common Dimensions of Bedroom Furniture.

Description	Width or Depth	Length	Height
Bedroom Furniture:			
Double beds	4′ 6″	6′ 6″	
Three-quarter beds	4′ 0″	6′ 6″	
Single beds	3′ 3″	6′ 6″	
Bungalow beds	3′ 0″	6′ 6″	
Bunks—double deck	2′ 6″	6′ 6″	4′ 10″
Cots	2′ 3″	6′ 6″	
Dresser or vanity	1′ 6″-1′ 7″	2′ 8″-4′ 0″	
Chiffonier	1′ 6″-1′ 7″	2′ 4″-2′ 6″	3′ 6″-4′ 1″
Chests	1′ 6″-2′ 0″	2′ 6″-4′ 0″	
Chairs—boudoir	2′ 6″	2′ 6″	
Chairs—side	1′ 6″	1′ 6″	
Bed tables	1′ 0″-2′ 0″	1′ 0″-2′ 0″	

TABLE V: Common Dimensions of Dining Room Furniture.

Description	Front to back	End to end	Height
Dining Room Furniture:			
Dining tables—rectangular	2′ 6″-3′ 6″	3′ 8″-6′ 0″	2′ 6″
Dining tables—round	4′ 6″-5′ 6″	diameter	
Dining chairs—side	1′ 6″	1′ 6″	
Dining chairs—arm	2′ 0″	2′ 0″	
Buffet	1′ 4″-1′ 6″	3′ 8″-4′ 6″	about 3′ 10″
China cabinet	1′ 0″-1′ 6″	2′6″-2′ 7″	4′ 8″-5′ 1″
Serving table	1′ 6″	3′ 6″-4′ 0″	2′ 6″

TABLE VI: Common Dimensions of Living Room Furniture.

Description	Front to back	End to end	Height
Living Room Furniture:			
Chesterfield beds Davenport beds Studio lounges Sofas—Divans	2′ 0″-3′ 6″	6′ 0″-7′ 2″	2′ 6″-2′ 9″
Love Seats	2′ 6″-3′ 0″	3′ 6″-4′ 6″	2′ 6″
Upholstered chairs	2′ 4″-2′ 9″	3′ 1″-3′ 9″	3′ 0″-4′ 0″
Unupholstered chairs	1′ 4″-1′ 6″	1′ 8″-2′ 3″	3′ 4″-3′ 10″
Pianos—standard	2′ 2″	4′ 10″-5′ 10″	3′ 8″-4′ 7″
Pianos—miniature	2′ 0″-2′ 1″	4′ 1½″-5′ 2″	
Pianos—Grand	4′ 1″-9′ 0″	4′ 5½″-5′ 2″	
Coffee Tables—			
rectangular	1′ 2″-1′ 6″	2′ 1″-2′ 4″	1′ 6″-1′ 8″
round	1′ 9″ dia.		1′ 6″-1′ 8″
End Tables —			
rectangular	1′ 0″-1′ 2″	2′ 0″-2′ 4″	1′ 10″
round	Various sizes		
Chesterfield table	1′4″	3′ 6″	2′ 4″
Card table	2′ 6″	2′ 6″	2′ 3″
Bridge Chairs	1′ 6″	1′ 6″	
Desk—flat top	1′ 8″	3′ 0″	2′ 6″
Radios—mantel	various sizes		
Radios—cabinet	various sizes		

TABLE VII: Dimensions of Rooms and Closets.

Taken from "Minimum Standards of Construction", National Housing Act, 1944

Dimensions of Rooms:

(a) Standard rooms shall at least comply with the requirements hereinafter set out:

Type	Minimum Floor Area	Minimum Width
Living room	150 sq. ft.	10′-0″
Dining room	80 sq. ft.	8′-0″
Kitchen	50 sq. ft.	5′-0″
First bedroom	110 sq. ft.	9′-0″
Additional bedroom	80 sq. ft.	7′-0″

(b) Combination rooms shall at least comply with the requirements hereinafter set out:

Type	Minimum Floor Area	Minimum Width
Living-dining combination	190 sq. ft.	10′-0″
Living and bedroom	200 sq. ft.	10′-0″
Kitchen and dining	90 sq. ft.	7′-0″
Living-dining-bedroom	230 sq. ft.	10′-0″
Living-dining-kitchen	230 sq. ft.	10′-0″

(c) A kitchen alcove or dining alcove shall have a minimum floor area of 40 square feet and a depth not exceeding the width of the open side.

(d) Ceiling heights shall not be less than the following:

Basement floor to underside of beams ..... 6′ 4″ clear height
Principal habitable rooms except bedrooms ..... 8′ 0″ clear height
Bedrooms and secondary habitable rooms ..... 7′ 6″ clear height
provided that sloping ceiling may be used in such rooms if at least 50 per cent. of the floor area has a clear height of 7′6″ and provided that any part of the floor over which the clear height is less than 4′6″ shall not be considered in computing the minimum floor areas.
Bathroom ..... 7′ 0″ clear height

(e) Closets.

1. Bedroom clothes closets shall have an aggregate floor area of not less than 7 per cent. of the room area. Where closets are less than 2′ 0″ deep the side walls shall not be more than 16″ from the door to the opening.

A minimum ceiling height of 6′ 0″ shall be provided above the required floor area of all clothes closets.

Floors of clothes closets over stairways may be raised not more than 8″ above the adjoining floor line provided that at least 50 percent. of the closet floor is parallel to the adjoining floor.

2. A linen closet shall be provided near the bedroom. The floor of such a closet may be raised not more than 2′6″ above the adjoining floor level.

3. A coat closet or suitable space for hanging outer garments shall be provided, accessible from the front entrance.

4. An additional storage space of at least 150 cubic feet must be provided for each family housing unit. In multiple dwellings this storage space may be provided in a basement or other storage room.

(f) Privacy.

Access from bedrooms to at least one bathroom shall be by means of a bedroom hall. If more than one bathroom is provided access to additional bathrooms may be directly off bedrooms.

LIST OF SELECTED REFERENCES

1. Regulations Governing Plumbing and Drainage; Division of Sanitation, Department of Public Health, Regina.

2. Safe Water Supplies for Rural Saskatchewan; Bulletin No. 2, Division of Sanitation, Department of Public Health, Regina.

3. Sewage Disposal for Rural Homes in Saskatchewan; Division of Sanitation, Department of Public Health, Regina.

4. Farm Water Supply; Bulletin No. 398, Ontario Department of Agriculture, Toronto.

5. The Single Chamber Septic Tank; Bulletin No. 444, Ontario Department of Agriculture, Toronto.

6. The Protection of Low Cost Insulation Against Moisture, Decay, Insects, Animals and Fire; College of Engineering, University of Saskatchewan, Saskatoon.

7. Protection of Insulation in Buildings Against Condensation, College of Engineering, University of Saskatchewan, Saskatoon.

8. House Insulation in its Relation to Canada's War Effort; National Research Council, Ottawa. (price 10c).

9. Insulating Farm Buildings; Agricultural Experiment Station, Agricultural College, Fargo, North Dakota.

10. Tree Planting on the Prairies of Manitoba, Saskatchewan, Alberta; Forest Nursery Station, Indian Head, Saskatchewan.

11. Planning the Prairie Farmstead with Special Reference to Tree Plantations, Lawns, and Fruit and Vegetable Gardens; Department of Horticulture, University of Saskatchewan, Saskatoon.

12. Literature on concrete mixing and insulation is available from commercial manufacturers' agents.

13. Care and Repair of the House; by Vincent B. Phelan; Superintendent of Documents, Washington, D.C. (price 20c).

14. Information on home financing may be obtained from the Housing Administration, Department of Finance, Ottawa.

15. Instructions for the Development of Dugouts, Domestic Dams, and Irrigation Projects; Bulletin No. 1 (revised) Department of Natural Resources, Regina.

16. Practical Irrigation for Beginners; by E. E. Eisenhauer, Department of Agriculture, Regina.

QUESTIONS ON HOME PLANNING, FURNISHING AND EQUIPPING

1. Is the home adapted to farm activities?
2. Does the shelter for the family cost too much?
3. Is the farmstead well drained? (page 34).
4. Is the farmstead area large enough for future buildings without overcrowding?
5. Is there an ample supply of good water? (page 34).
6. Is the farmstead readily accessible from the highway or a good main road? (page 35).
7. Will the soil of the farmstead site support strong tree growth for shelter belts and beautification? (page 34).
8. Has the possibility of irrigating lawns, gardens, and trees been considered? (Write for "Practical Irrigation for Beginners" by E. E. Eisenhauer, Department of Agriculture, Regina.)
9. Is accommodation in the farm house flexible?
   (a) Is contraction possible? That is, when the family has grown up and left home, is it practical to close off part of the house to minimize the housework and to save fuel?
   (b) Are there enough rooms for additional members of the family—children, guests, aged parents, hired help?
10. Are the entrances well planned? (See pages 22 and 23).
   (a) Is the "service entrance" (back entrance) so planned that other parts of the house are readily accessible without using any room as a passageway?
   (b) Is the service entrance protected from the weather?
   (c) Does the service entrance catch most of the dirt brought in on outdoor clothing and footwear and thereby save the housewife a great deal of housecleaning?
   (d) Is the front entrance easily accessible from the driveway and from the main work areas of the home? Is it protected from the weather? Is provision made for hats, coats, footwear, etc.?
11. Are doors placed near corners where they waste the least floor space?
12. Is there a washroom or bathroom on the ground floor where it is easily reached from the service entrance and other parts of the house?
13. Is there at least one room on the ground floor that could be utilized as a bedroom when desired?
14. Has the possibility of arranging bathroom and kitchen plumbing on opposite sides of the same wall been considered?
15. Has consideration been given to the wiring and plumbing of the house?
16. Are the work counters, tables, and the sink at the proper height? (See Table III, page 27).
17. Is the food-handling sequence correct: entrance, storage, preparation, cooking, serving? (See figure 13, page 26).

18. Is the dining area large enough and is it handy to the meal preparation area in the kitchen?

19. Is the view from the kitchen pleasing and does it give the housewife a chance to keep in touch with outdoor activity?

20. Are the basement stairs easily reached from the kitchen? From the utility room and service entrance?

21. Are the stairs safe and comfortable? (pages 20 and 21).

22. Are there sufficient windows to make the basement bright and cheerful?

23. Is the space in the basement being used to the best advantage? (Page 32).

24. Can running water be supplied in the kitchen, washroom and bathroom?

25. Has provision been made for a kitchen sink with work surfaces on both sides? (See figures 15, 16, 17, 18, 19, 20).

26. Has each bedroom a clothes closet? (See figure 5, page 17).

27. Are the closets for clothes at least 24 inches deep?

28. Is there sufficient storage for bed linen, towels, and table linens?